# Group Effectiveness Research Laboratory

DEFARTMENT OF PSYCHOLO AY UNIVERSITY OF ILLINOIS URBURA, ILL.

# OF IMPLICATIVE RELATIONSHIP AMONG CONCEPTS AND THE ANALYSIS OF VALUES

HARRY C. TRIANDIS
AND
KEITH M. KILTY
UNIVERSITY OF ILLINOIS

4. V. SHANMUGAM INDIAN INSTITUTE OF MASS COMMUNICATION NEW DELHI, INDIA

YASUMASA TANAKA GAKUSHUIN UNIVERSITY TOKYO, JAPAN

AND

VASSO VASSILIOU ATHENIAN INSTITUTE OF ANTHROPOS ATHENS, GREECE

TECHNICAL REPORT NO. 56 (68-1) APRIL, 1968



Communication, Cooperation and Negotiation in Culturally Heterogeneous Groups Project Supported by the Advanced Ensearch Projects Agency, ARPA Older No. 454 Under Office of Navoi Research Contract NR 177-472, Nonr 1834

FRED E. FIEDLER AND HARRY C. TRIANDIS Principal Investigators

DISTRIBUTION OF THIS DOCUMENT IS UNLIMITED



CULTURAL INFLUENCES UPON THE PERCEPTION OF IMPLICATIVE RELATIONSHIP AMONG CONCEPTS AND THE ANALYSIS OF VALUES

Harry C. Triandis, et al

Illinois University Urbana, Illinois

April 1968

GROUP EFFECTIVENESS RESEARCH LABORATORY

DEPARTMENT OF PSYCHOLOGY

UNIVERSITY OF ILLINOIS

URBANA, ILLINOIS

Cultural Influences upon the Perception of Implicative Relationship among Concepts and the Analysis of Values

> Harry C. Triandis and Keith M. Kilty University of Illinois

A. V. Shanmugam Indian Institute of Mass Communication New Delhi, India

Yasumasa Tanaka Gakushuin University ' Athenian Institute Tokyo Japan

Vasso Vassiliou of Anthropos Athens, Greece

Technical Report No. 56 (68-1)

April, 1968

Communication, Cooperation, and Negotiation in Culturally Heterogeneous Groups

Project Supported by the

Advanced Research Projects Agency, ARPA Order No. 454 Under Office of Naval Research Contract NR 177-472, Nonr 1834(36)

Fred E. Fiedler and Harry C. Tria.dis Principal Investigators

> DISTRIBUTION OF THIS DOCUMENT IS UNLIMITED

Cultural Influences Upon The Perception Of Implicative Relationship Among Concepts and The Analysis Of Values

Harry C. Triandis and Keith M. Kilty

University of Illinois

A. V. Shanmugam Yasumasa Tanaka Vasso Vassiliou

Indian Institute of Gakushuin University Athenian Institute of

Mass Communication Tokyo, Japan Anthropos, Athens, Greece

New Delhi, India

#### ABSTRACT

A new method for the analysis of the implicative relationships among concepts was presented. The method has sufficient reliability. It reveals meaningful cross-cultural differences in the perception of 20 concepts. The responses of approximately 1,500 male students, from Illinois, USA, Athens, Greece, Southern India, and Tokyo, Japan, provided information about cultural differences in the perception of causal relationships involving these concepts. The data were also employed in an analysis of values. The major trends of the results suggest that the Americans valued mostly achievement, self-development and peace of mind; the Greeks affiliation; the Indians status; and the Japanese achievement, self-development and aesthetic satisfaction.

Cultural Influences Upon The Perception of Implicative Relationship Among Concepts and The Analysis of Values

# Harry C. Triandis and Keith M. Kilty

University of Illinois

A. V. Shanmugam Yasumasa Tanaka<sup>2</sup> Vasso Vassiliou

Indian Institute of Gakushuin University Athenian Institute of

Mass Communication Tokyo, Japan Anthropos,

New Dalhi, India Athens, Greece

#### Introduction

All humans use categories when responding to their environment (Kluckhohn, 1954), i.e., they respond to different stimuli in identical or very similar ways. There is much evidence that the content of these categories is strongly influenced by culture (Triandis, 1964), and that language is strongly implicated in categorization and generally in cognition (Steffire, Vales & Morley, 1966).

This study was supported by the contract to study "The Behavior of Culturally Heterogeneous Groups" between the University of Illinois and the Advanced Research Projects Agency and the Office of Naval Research (Contract NR 177-472, Nonr 1834(36); ARPA Order No. 454; Fred E. Fiedler and Harry C. Triandis, Principal Investigators). The data were collected by Earl Davis and Keith Kilty, in America; Yasumasa Tanaka, Yoko Iwamatsu and Tomoe Abe, in Japal; A. V. Shanmugam and Vijay Shanmugam, in India; and Vasso Vassiliou, Maria Nassiakou, and Voula Argyropoulou, in Greece. The analyses and several methodological side studies were carried out by Keith Kilty. David Summers made useful critical comments on an earlier version of this manuscript.

<sup>&</sup>lt;sup>2</sup>Currently at the University of Saskatchewan, Canada.

Cultural influences are not only important in determining the content of categories (Triandis, 1964, pp. 20-22), but they are also important in determining the subjective probabilities that one category is related to another. Such subjective probabilities are worthy of analysis. For example, when a particular individual sees a definite connection between the category OPEN OCCUPANCY and the category SLUMS the affect which is associated with the category SLUMS is transferred to the category OPEN OCCUPANCY (Peak, 1955; Rosenberg, 1956; Fishbein, 1961; Vroom, 1964). Thus, analyses of the subjective connections among categories is relevant to (a) any analysis of the phenomenological field (McLeod, 1947), (b) analyses of cognitive structures and their relationship to affective responses (Rosenberg, 1956; Fishbein, 1961), and (c) the relationship between the phenomenal field and behavior (Vroom, 1964). Since such subjective probabilities are influenced by cultural factors (Triandis, 1964, pp. 23-25), it is important to develop procedures for the study of these influences.

Deese (1966) has argued that the meaning of a word is given by the potential distributions of the responses to it. He takes the associations to a word, obtained by the usual method of one response per subject, as a sample of this distribution. He proposes that this sample defines a subset of the general meaning of the word and calls this the associative meaning of the word. Szalay and Brent (1967) have shown that cultural meanings of words may be obtained from analyses of the free verbal associations of subjects from different cultures.

Tanaka, Iwamatsu and May (1968) have demonstrated a close correspondence between the associative meaning and the affective meaning of nation concepts. Using an associative index which measures "international discomfort" they found that, when a nation is associated with discomfort, increasing events, such as war or ideological conflict, the affective meaning of that nation tends to be low on semantic differential evaluation and high on instability; and vice versa.

While free associations have much to recommend them in the analysis of meaning, naturalistic observations suggest that the full range of these associations is not involved when two people disagree about an issue. For example, if Negroes and whites are asked to negotiate a variety of civil rights issues in the laboratory, as was cone by Davis and Triandis (1965), they usually disagree only about the consequences of various negotiation agreements. Specifically, the concept OPEN OCCUPANCY is seen as leading to JUSTICE, EQUALITY, etc., by Negroes and to SLUMS, DEPRESSED PROPERTY VALUES, etc., by prejudiced whites. Thus, though OPEN OCCUPANCY may elicit a variety of associations, such as "brick houses," "debate in the Senate," etc., it is only a limited set of these associations that appears in disagreements about this concept. Furthermore, Davis and Triandis (1965) have shown that analyses of the subjective implications of OPEN OCCUPANCY predict the behavior of naive white subjects when they negotiate with Negro confederates on this issue.

Thus, if we are interested in studying cultural differences in the meaning of words, so that we may observe the way people from words, it seems more efficient to study controlled word associations, rather than free word associations. The present paper presents a method which allows the study of controlled word associations.

In studying the meaning of words it is often desirable to make a distinction between the connotative meaning of a word and the denotative meaning of the same word. Osgood's semantic differential (Osgood, Suci and Tannenbaum, 1957) is a widely used instrument for the measurement of connotative meaning. Results obtained with this instrument suggest that certain aspets of meaning escape measurement. For example, GOD and COCA-COLA have rather similar semantic differential profiles, for certain kinds of people; i.e., both concepts are "good," "powerful," and "active." Nevertheless, it is obvious that the two words mean something very different.

"It is clear on purely interitive grounds that the concepts HERO and SUCCESS, which have similar semantic differential profiles, do not mean the same thing. It is, therefore, important for studies of the behavior of culturally heterogeneous groups to develop additional procedures for the measurement of similarity of concept meaning" (Forster, Triandis and Osgood, 1964, p. 1). Scarting from this observation, Osgood and Triandis proceeded in two different directions. Osgood initiated his semantic features analysis (Osgood, 1966), which when fully developed is likely to be the most powerful technique for the measurement of denotative meaning. Triandis developed the present

procedure, which is only a modification of well-established free association procedures, but which appears directly relevant for studies of interpersonal conflict in culturally heterogeneous groups.

As stated above, the implications, or consequences of a particular concept appear particularly relevant in analyzing interpersonal conflict. However, a secondary source of irritation and disagreement among negotiators concerns the antecedents of a concept. For example, both labor and management may value INDUSTRIAL PEACE, but they see different events as leading to this desirable state of affairs. Labor may see "profit sharing" or the "Scanlon plan" as related to INDUSTRIAL PEACE, while management may see no connection between these concepts. Thus, it appears worthwhile to examine not only the perceived consequences of a particular event, or state of affairs, but also the perceived antecedents of the event.

The present paper presents a new technique for the study of implicative relationships called the "antecedent-consequent method" and data from America, Greece, India, and Japan that illustrate the use of this method in the description of differences in the meaning of concepts. In order to illustrate the method, we studied the implicative relationships associated with 20 concepts. The present method also provides a procedure for the cross-cultural study of values.

#### Me thod

#### Samples:

The samples were male students (upper levels of high school or lower level of college). When we employ the word Americans we mean

residents of Illinois; the Phase I subjects were high school students in kockford, Illinois, and the Phase II subjects were students at the University of Illinois. When we employ the word Greeks we mean residents of Athens, Greece. The Greek sample was taken from a representative sample of the population of Athens, by sending interviewers back to interview further those males who gave "student" as their occupation in a previous interview. The sample of Indians consists of male students at the Agricultural University of Bangalore. They speak an Indian language called Kannada, which is spoken by about 40 million people. When we use the word Indians, then, the reader should translate it into "gannada speaking residents of the State of Mysore, in Southern India, attending an urban university." Finally, the Japanese "are students attending a number of universities in the Tokyo area. Most of them were from Gakushuin University which is an upper-class private university.

It is clear that the samples are not as equivalent as is desirable. For example, on social class, the American and Greek samples are probably reasonably representative of the middle class in those countries, while the Indians and Japanese are probably more upper than middle class. However, it should be remembered that in studying cross-cultural differences it is impossible to employ truly representative samples, when a large number of responses per S are required. Rather, it is more economical to select homogeneous samples of known characteristics and to keep in mind, when interpreting the results,

that the findings do not apply to the whole country but only to a specific sample. Certainly, to describe a country like India, with 400 million people, 70 major languages, all the major religions of the world, etc., is beyond the scope of any research project.

#### Concepts

by Osgord (1934) and his associates in the development of semantic differentials for different cultures. These words have the property that bilinguals from several cultures are able to translate them from English into their own languages and different groups of bilinguals usually translate them correctly back into the original English. The selection of concepts are Osgood's list had the further advantage that the semantic differential profiles of these words, obtained from indiginously developed semantic differentials, were available as part of the World Atlas of Affertive Meanings (Osgood, Jakobovitz and Miron, in preparation).

The twenty selected concepts were chosen because they covered a wide range of significant categories. They were also quite abstract and thus likely to allow for the discovery of cultural differences.

The following words were used:

Emotions: Anger, courage, fear, and laughter.

Ambiguous Political or Individual Concepts: Freedom, peace.

Abstract Philosophical: Truth.

Social Control: Punishment.

Social Disruption: Crime.

Achievement: Knowledge, power, progress, success, and wealth.

Non-achievement: Death and defeat.

Basic Social Relations: Love, respect, sympathy, and trust.

#### Instruments

# Procedure for Phase I:

The 20 concepts were translated into Greek, Kannada (South India) and Japanese. A different group of bilinguals translated them back into English. Modifications in the translations were made when necessary. This method of double translation has been used throughout this project. They were then placed into sentences that approximated the following English format:

"If you have....., then you have ANGER."

The Ss supplied three fill-ins to such sentences for each of the 20 concepts. Thus, a list of the antecedents of the 20 concepts was obtained. Similarly, the Ss were asked to fill in sentences of the form:

"If you have ANGER, then you have....."

Again, the Ss supplied three responses for each of the 20 concepts, thus giving us a list of "consequents" for the concepts.

A total of 100 males from each of the four cultures, thus supplied a total of 6,000 antecedent and 6,000 consequent responses in each culture. The tabulation of the 6,000 antecedents or consequents was done by concept. Thus, the 300 antecedents or consequents for each concept, in each culture, were tabulated in descending rank-order of frequency.

All these responses were then double translated and the English equivalents were shipped to Illinois. Inspection of these lists allowed judgments which followed three steps:

- 1. For each compet and each culture the 10 most frequent antecedents (As) and consequents (Cs) were selected.
- 2. The 10 most frequent As or Cs, for each concept, were examined to determine if an A or C that had a high frequency in one culture also had a high frequency in one other culture. Those antecedents (or consequents) appearing in more than one culture were labeled "culture common."
- 3. The process of comparison was continued until we had a list of 5 culture common words for each of the 20 concepts. In addition, we developed lists of 5 "uniquely American," 5 "uniquely Greek," 5 "uniquely Indian," and 5 "uniquely Japanese" antecedents or consequents. Finally, 5 "hunch" words were selected because they represented an unusual point of view. These hunch words needed no specific frequency, but appeared to be "interesting." One of the characteristics of the "hunch" As or Cs is that they were "theoretically interesting." For example, there are disputes in anthropology concerning whether or not there are "guilt cultures" and "shame cultures." The implications of such disputes would be that the consequences of CRIME would be different. CRIME should be seen as leading to guilt or to shame with differential frequencies in these two types of cultures.

To summarize: From the procedures adopted in Phase I we developed a list of 30 As and 30 Cs for each concept. These 30 As or Cs consisted of 5 culture common concepts, 5 concepts from each of the four cultures, and 5 "hunch" As or Cs.

# Procedure for Phase II:

The following instructions were used in this phase:

# INSTRUCTIONS

We won	uld	like	to	learr	wha	t cer	tain	CONCEPTS	me	an	to	you.	On	the	following
pages	you	will	fi	ind th	ese v	eords	cap	italized	in a	8 8	tar	dardi	.:ed	sent	tence
which	you	are	to	comp1	ete.										

There	will !	be tw	o kinds	of	sentences	on	each	page.	The	first	will	be	like
the f	ollowi	ng sa	mple:										

If there is , then there is MURDER.

Beneath each sentence will be six sets of five Lords each. Here is an example of one such set:

revenge
hate X
insanity
theft
fear

In each set of five words, you are to check the one which, in your opinion, best completes the sentence. As you can see in the sample, "hate" has been checked. What we are asking you for in the first sentence is what goes before, precedes, or causes the concept to come about.

Note that all five alternatives in the set are reasonable. We want you to pick the best one which you think goes before, precedes, or causes the concept to come about.

In the second sentence on each page, we will ask you for the result, consequence, or outcome of the capitalized concept. The following is an example of this second kind of sentence:

If there is MURDER, then there is \_\_\_\_.

Again, beneath the sentence you will find six sets of <u>five</u> words each, such as:

1. imprisonment grief execution disgust police	<u>x</u>

Once more, you are to check one of the five words in each set, as in the example above.

Please note again that all five words in the set are reasonable, but we are asking you to pick the best one which you think 's a result, consequence, or outcome of the concept.

Please make sure that you check one of the words in each of the six sets; the one out of the five words you think is best. Work it a fairly high speed and try to give us your best "first impressions." But, please do not be careless, because we want your true impressions.

Thank you very much for your cooperation.

The format of the instrument is exemplified by showing the sheet for the antecedents and consequences of PROGRESS (Table

It is intuitively obvious that the context of judgment will influence whether a particular A or C is chosen as the best A or C. Clearly, if a particular A is imbedded in a set of As that are most inappropriate, it will be chosen by all Ss. For this reason we controlled the context.

Each basic set of five words had the following characteristics: (a) It had one culture common, one American, one Greek, one Indian and one

Japanese A or C; (b) the frequencies of these As or Cs were approximately the same; (c) the order of presentation was varied systematically.

Ideally, the order of presentation of the words and of the 6 sets of 5 As or 5 Cs should have been randomized. However, the clerical work of mimeographing and assembling the instrument was formidable. We compromised by using only 18 different variations of the questionnaire.

The basic format of the questionnaire followed the arrangement shown in Table 2a.

The frequencies that head the columns of this table are intentionally overlapping. This allows us to place a word from a particular column into an adjacent column. Thus, the 18 variations of the questionnaire could allow for manipulation of the context, while keeping the frequencies approximately matched. For example, one of the formats was the one shown in Table 2b.

Note that each column has one C, A, G, I, and J. The hunches always stayed in the same set, but they were rotated. The frequencies in a set

# Table 1

If there is \_\_\_\_\_, then there is PROGRESS.

1.	2.		3.
research	knowled	gestu	dy
ambition	ability	edu	cation
diligence	will por		erested
courage	strengtl	uni	ty
endeavor	invention	on imp	rovement
4.	5.		6.
hard work	money		peration
initiative	drive	frie	ends
peace	luck	for	sight
enthusiasm	good cor	nduct hone	esty
seriousness	thinking	help other	o from
₹.			
11	there is PROGRESS, the	nen there is	
1.	there is PROGRESS, the	nen there is	3.
		men there is glo	
1.	2.		ry
l.	2. wealth	glo	ry
l. success achievement	2. wealth ability	glo: mone	ey
l. success achievement well being	2abilitycivilize	glomone imp	ry
1. success achievement well being respect	2. wealth ability civilize courage	glomone imp	ry ey rovement i name
1. success achievement well being respect expansion	2. wealth ability civilize courage increas	glomon mondation imposed good good good good good good good go	ry  rovement i name  venience
achievement well being respect expansion 4.	2.  wealth ability civilize courage increas:	glomone impose good good good good good good good goo	ry rovement i name venience 6.
1. success achievement well being respect expansion 4. power	vealth ability civilize courage increas: 5. knowledge	glomone impose good good good good good good good goo	rovement i name venience 6. entific elopment al decline
1. success achievement well being respect expansion 4. power inventions	vealth ability civilize courage increas: 5. knowlede automat: satisfac	glomation glowation good geometric	rovement i name venience 6. entific elopment al decline

Table 2a: Arrangement of Antecedents or Consequents in the Basic Format of Phase II.

# Frequency of Word in Phase I

Type of Word

	10-50	8-15	5-10	4-7	4-7	4-7
Culture Common	Cl	C2	СЗ	C4	C5	Hl
American	A1	A2	АЗ	A4	A5	<b>Б</b> 2
Greek	G1	G2	<b>G</b> 3	G4	G5	нз
Indian	11	12	ī3	14	15	Н4
japanese	Jl	J2	J3	J4	<b>J</b> 5	Н5

Note: C = Culture Comman; A = American; G = Greek; I = Indian; J = Japanese; H = Hunch word.

Table 2b: Example of One Arrangement of Antecedents or Consequents.

A5	C4	13	G2	Jl	КЗ
J4	A4	C2	11	G1	Н5
G4	<b>J</b> 5	А3	С3	12	Hl
C5	G5	<b>J2</b>	Al	C1	Н4
7.4	76	CO	TO	Δ2	นว

were about the same. In the form shown in Table 2b, columns one and two have words with frequencies of 4-7 (of course, there are more words to choose from this frequency range than from the ranges with larger frequencies). Column three has word with frequencies of 5-15, columns four and five have words with frequencies of 10 or more.

In addition to the 6 formats of the questionnaire, we developed three forms which contained a different set of words. Forms A, B, and C had the words shown in Table 3. All forms began with the word PROGRESS and ended with the word TRUTH.

The 6 formats and the three forms, then, made a total of 18 different questionnaires. Each questionnaire was given to about 20 Ss from each culture. A total of about 360 Ss per culture responded to phase II, all of whom were male students. The task took about 45 minutes.

# Analysis of Phase II:

The responses of the Ss to the 30 As and 30 Cs for each concept in each culture were summed. As can be seen from the above description of the procedure, except for the concepts PROGRESS and TRUTH which were present in all three of the forms (A, B, and C), the concepts appeared in two of the three forms. Thus, each concept appeared in 2 forms and 6 formats or 12 different questionnaires. The questionnaires were distributed to large classes of students and all variations of the questionnaire were handed out at the same time. By chance some of the 18 variations were taken by slightly more or slightly less than the intended 20 students per variation. If exactly 20 students had taken

Table 3

The Words Used in the Study and the Forms (A, B, or C) in Which They Were Placed

PROGRESS	A	В	С
TOAE		В	С
FEAR	A	В	
SYMPATHY		В	C
PEACE		В	C
DE FEAT	A	В	
TRUST	A	В	
KNOWLEDGE		В	C
CRIME		В	C
RESPECT		В	C
SUCCESS	A		C
PUNISHMENT	A	В	
FREEDOM	A		C
POWER	A	В	
DEATH	A		C
COURAGE	A	В	
WRALTH	A		C
ANGER	A		С
LAUGHTER	A		C
TRUTH	A	В	C

each of the questionnaires, each concept would have been responded to by 40 students. Since there are 5 formats of the context of the responses, if we disregard the format, we would have judgments by 240 students. Since each of the students made 6 responses on the antecedent and 6 on the consequent side, there would be a total of 240 x 6 = 1,440 responses to each concept. Examination of Tables 10 to 49 shows that the number of responses per culture ranged from 1,100 to 1,533. For the concepts PROGRESS and TRUTH the numbers ranged between 2,086 and 2,259 instead of the 2,160 that would have been obtained if exactly 20 Ss had responded to the concepts.

# Correlations Among the Cultures

In order to obtain an impression of the overall similarity in the obtained data, from phase II, the frequencies recorded in Tables 8 to 48 were correlated across cultures. These correlations are based on a typical N of 30 (the number of As or Cs). Since there are 4 cultures, there are 6 possible correlations among them. Since there are 20 concepts there are 120 correlations based on the antecedents and 120 based on the consequents.

#### Results

#### Reliability

Since the instrument was designed to study cultural differences, test-retest reliability would provide an overestimate of the needed reliability. The needed reliability may be called intra-cultural reliability and is obtained across samples from within the same culture.

Accordingly, the responses of the 180 male high school, 120 female high school, 139 male university and 85 female university American students, to five of the 20 concepts, chosen randomly, were employed to compute reliabilities. The correlations between the frequencies of the responses of the high school students and the college students for the five concepts are shown in Table 4. When these coefficients are converted to Z-scores, averaged and reconverted, a mean correlation of .76 is obtained. Since this is a lower bound of the intra-cultural reliability of the instrument, it appears that the instrument has sufficient reliability for cross-cultural comparisons.

Kilty did a number of additional studies with the above samples. He compared the responses of males and females, as well as male high school vs. male college students, and examined the results among 5 forms using the proportional Z-test (Ferguson, 1966, Pp. 176-178). In this study he had 5 concepts, 5 sets per concept, and both antecedents and consequents. Thus, he computed 5 x 5 x 5 x 2 = 250 Z-tests for each comparison. He found 93 percent of the Z-values to be non-significant (at p < .05). Thus, there are no characteristic ways in which American males and females, or high school and college students differ in their responses to this instrument.

# Consistency Across Cultures

A set is here defined as the five responses from which an S chooses one. Each concept has 6 sets of antecedents and 6 sets of consequents. A set are 6 formats of the instrument. For every format we have a different arrangement of the words in each set. Therefore, to keep

Table 4

Intra-cultural Reliabilities

(American High School vs. American College Students)

Concept	Antecedents	Consequents
DEFEAT	.54	.88
KNOWLEDGE	.71	.62
LAUGHTER	.89	.82
RESPECT	.75	.71
WEALTH	.63	.82

everything controlled, our cross-caltural comparisons must be made for each set, and for each format. Since we have 6 sets and 6 formats there are 36 chi-squares to be computed for each concept on the antecedent side and 36 on the consequent side. For example, consider the responses to the concept PROGRESS for a particular set by Ss in the four cultures (Table 5).

The Americans chost cooperation and foresight, the Greeks cooperation and help from others, the Indians honesty, and the Japanese foresight and honesty. We can conclude that there are cultural differences, because the chi-square is significant at the .001 level.

Table 6 shows the distribution of the chi-square obtained from these analyses.

It is obvious that the overwhelming majority (93%) of the chisquares is significant. Thus, while the majority of the withinculture chi-squares is non-significant, the majority of the acrosscultures chi-squares is significant.

### Correlations Among the Cultures

The 20 concepts times the 6 possible comparisons among the 4 cultures allowed for 120 comparisons based on the antecedents and an equal number based on the consequents. Table 7 shows the number of times the correlations between two cultures reached the .05 level of significance.

The maximum possible entry in Table 7 is 20 (the number of concepts).

It can be seen that the American frequencies agreed with the Japanese frequencies to such an extent that 85 percent of the antecedent correlations and 100 percent of the consequent correlations were signi-

Table 5

Number of Ss Choosing Each Antecedent of PROGRESS

Antecedent	Americans	Greeks	Indians	Japanese
Cooperation	10	10	7	2
Friends	4	6	7	5
Foresight	12	5	8	22
Honesty	6	4	11	11
Help from other	s 4	12	7	2

Table 6
Number of Significant Chi-squares

Number of Chi-squares Significant at

Format No.	p≽.05	<b>p&lt;.</b> ℃5	r<.02	p<.01	p<.001	total of
I	15	7	8	33	177	240
11	22	18	10	29	1.61	240
111	19	13	8	30	170	240
IV	16	12	7	34	170	239
v	16	4	11	24	185	240
VI	12	17	5	37	169	240

Insufficient marginal frequencies prevented the computation of one Chi-square.

Table 7

Number of correlations between the four cultures that reached beyond the .05 level of significance

(Antecedents above and Consequents below diagonal)

	Americans	Greeks	Indians	Japanese
Americans		11	6	17
Greeks	16		6	12 56
Indians	5	6	***	4 )
Japanese	20	10	3	
		60	**	Total: 116

Table 8

Number of correlations between the four cultures that reached beyond the .01 level of significance

(Antecedents above and Consequents below diagonal)

	Americans	Greek <b>s</b>	Indians	Japanese
Americans		8 ·	2	14
Greeks	8		2	9 🕺 37
Indians	3	3		2)
Japanese	19	8	0	
		41		Total: 78

ficant. Since one of the correlations in each cell of Table 7 is likely to be significant by chance, we can state that the Greeks are equally close to the Americans and the Japanese on the antecedent side, and closer to the Americans on the consequent side than to any other culture. The Indians are the most remote from the other three cultures and equally far from the Americans and Greeks on the antecedent side and also the consequent side.

Table & present the same data, with a more stringent level of significance. The pattern of similarities among the cultures does not change.

It seems notable that 47 per cent of the correlations are significant on the antecedent side and 50 per cent are significant at the consequent side (Table 7).

A more detriled analysis of the kinds of concepts on which the cultures agreed revealed no major shifts, except that the Greeks and the Indians agreed closely on FREEDOM and PEACE and on these two concepts the Americans and the Japanese were particularly close.

On those concepts on which two cultures are in close agreement we would expect no scrious communication problems. On those concepts on which the correlation is small or negative we would expect the maximum difficulty in communication.

# Relations between Phases I and II

Do the Ss in each culture prefer the As or Cs that their culture provided in Phase I? The answer to this question is quite affirmative. We examined the percentages of the time that members of a culture those the As and Cs provided in Phase I by other members of their own culture. If the choice were random, then 20 per cent of the time they would have chosen the Phase I response that we considered "culture unique" for their culture. Actually, they chose it 43 per cent of the time. Breaking this down by format, the six formats gave 44, 43, 41, 45, 41 and 44 percent, respectively. The stability of these results is high; there is no doubt that the cultures have "preferred antecedents or consequents" which they chose over the As and Cs provided by the other cultures. In fact, examination of the response patterns strikingly shows that the Ss tend to pick either the culture common or the As or Cs of their own culture most of the time. This implies that the As and Cs obtained from Phase I should be similar to those obtained in Phase II.

However, this conclusion is not entirely justified if we examine only those As or Cs which were chosen significantly frequently in Phase II. In Table 9a we traced the origin, in Phase I, of those As that were significantly frequently chosen by various samples in Phase II.

The Table is based on 5 of the twenty concepts, chosen randomly. It is clear that only 50 per cent of the significant (in Phase II) American antecedents were also emitted by Americans in Phase I. For the other samples the percentages were: Greeks 50 per cent, Indians 72.5 per cent,

Table 9a

Phase I Origin of As That Were Significantly Frequent in Phase II

# Origin in Phase I

Sample (In Phase II)	Culture Common	American	Greek	Indian	Japanese	Total
Americans	11	7	7	2	9	36
Greeks	5	2	9	4	8	28
Indians	7	5	3	14	0	29
Japanese	14	.2	7	1	15	39
TOTAL	. 37	16	26	21	32	

# Table 9b

# Phase I Origin of Cs That Were Significantly Frequent in Phase II

# Origin in Phase I

Sample (In Phase II)	Culture Common	American	Greek	Indian	Japanese	Total
Americans	13	7	5	4	7	26
Greeks	8	4	13	3	0	28
Indians	7	1	0	8	2	18
Japanese	9	1	3	3	8	24
TOTAL	. 37	13	21	23	17	

rger: Americans 77 per cent; Greeks 75 per cent; Indians 83 per cent and Japanese 71 per cent. In other words, the procedure of Phase II introduced "suggestions" to members of each culture which they had not produced spontaneously in Phase I. In the case of the antecedents the Americans and the Greeks are the most "suggestible"; the Japanese the least "suggestible." On the other hand, in the case of the consequents, the Americans were the most "suggestible" and the Indians the least "suggestible."

By looking at Tables 9a and 9b we can also see which culture supplied the most attractive "suggestions." We note that the Americans and Greeks were most susceptible to the Japanese suggested As, and that the Americans were also very susceptible to Japanese Cs, but not the Greeks. The 'ndians and the Japanese apparently are more idiosyncratic in choosing As a Cs, since they are less "suggestible" than the other cultures.

We conclude that Phase I and Phase II give similar, but not identical, results. The Phase II results, since they allow the Ss to consider a wider range of As and Cs, are probably the most interesting. The difference between Phase I and Phase II results might be conceived as the difference between recall and recognition. In Phase I something stored in the S's cognitive system is strong enough to be recalled. In Phase II the S is confronted with several potential responses and he chooses one because he recognizes its importance (or suitability).

#### The Main Analysis

For the main analysis we collapsed all 18 variations of the questionnaires and simply counted the frequencies of choice of each A and each
C. Since there are 30 As and 30 Cs for each concept we simply tabulated
the frequencies of choice of each A and C, for each culture, as is shown
in Tables 10-49.

As mentioned earlier the totals of the columns in these tables ranged from 1,100 to 1,533 for most concepts, except for the two concepts which appeared in all three of the forms of the questionnaire, which had totals ranging from 2,086 to 2,259. By dividing these totals by 30, it is possible to obtain the mean frequency for any A or C. If the responses were random, most of the observed frequencies would be similar to these mean frequencies. Through thi-square analysis it is possible to determine the limits of frequencies that are either significantly higher or lower than the corresponding mean frequency. We chose the .01 level of significance, because with p < .05 and with 30 frequencies, one or two would be significant by chance. We then underlined the frequencies that are either significantly higher or significantly lower than the mean frequencies. These appear in the even numbered Tables 10 to 49. We also listed, in descending order of frequency, in Tables 11 to 49, the As and Cs that appeared significantly more frequently than chance. Thus, inspection of Tables 10 to 49 will give the reader an overall glance at the main results. In underlining the significant frequencies, we used the symbol \_\_\_\_ to indicate that it was significantly high and \_\_\_\_

to indicate that it was significantly low.

The 20 concepts employed in the present study were also used by Osgood, Jakobovitz and Miron (in preparation) in the Atlas of Affective Meaning. They employed a short form of the semantic differential specially developed for each culture (see Osgood, 1964; Jakobovitz, 1966). Since the semantic differential data were available for all the cultures studied in the present project, it was possible to include in Tables 11 to 49 (odd-numbered) a selected set of semantic differential indices.

These indices were obtained from Osgood et al (in preparation) and consist of the Evaluation, Potency, and Activity of each concept, the same information in standard score form, relative to the way the Ss of a particular culture rated the 500 Atlas concepts (indices  $Z_E$ ,  $Z_p$ ,  $Z_A$ ), ratings of the familiarity of each concept, obtained from a "familiar-unfamiliar" semantic differential scale, and "conflict indices" (C) that measure the extent of within-culture disagreement in the semantic differential ratings. High conflict indices imply a variety of points of view about concepts, in the particular culture.

A Note on the Interpretation of Cultural Similarities and Differences:

In the pages that follow there will be discussions of cultural similarities and differences in the responses of subjects to a variety of concepts, on both semantic differentials and the antecedent-consequent meaning instruments. First, we should remember that unless there is a substantial similarity in the obtained results, we will be unable to know that the concepts have been properly translated across cultures. It is essential

been properly translated. Second, in looking for cultural differences, we must remember that a single statistically significant result may be due to either a real difference or a translation difficulty. Thus, we will emphasize differences mostly when they are seen to occur in the case of several logically interrelated antecedents or consequents, rather than for a single antecedent or consequent. Single results may be important when a cultural interpretation of the results can be readily supplied.

When such explanations are not readily available they might be used as "hypotheses for further research," but until they are anchored with some other set of empirical data, their status must be considered uncertain.

On the other hand, when some common theme emerges from the analysis we can be reasonable certain that it is not random or due to translation difficulties. Cultural Differences in the Meaning of Emotions

ANGER: The data that Osgood et al (in preparation) collected on the semantic differential judgments of 500 concepts in 23 cultures shows that all four cultures evaluate ANGER negatively. The Greeks see this concept as low in activity but high in familiarity.

Examination of Table 11 suggests that the main themes of the anteceder is of ANGER around the world are injury to self-esteem, frustration, and deviation from "correct" conditions. The Americans and Greeks correlate .41 (p < .05) and emphasize the first theme (hate, injustice, insult, ridicule), but also mention frustration (jealousy). The Indians are quite idiosyncratic and emphasize mostly frustration (scolding, failure, enemies), but also emphasize injury to self-esteem (nickname, no patience). The

Table 10 Frequencies of Antecedents and Consequents of ANGER

^ntecedents					Consequents				
	Amer.	Greek	Ind.	Japanese		Amer.	Greek	Ind.	Japanese
bad manners	13	64	<u>26</u>	30	animosity	<u>76</u>	49	<u>72,</u>	46
bud temper	104	31	67,	45	break in relations	34	47	38	34
betrayal	<u>76,</u>	48	19	130,	brute force	11	31	33	55
contempt	74,	30	22	<u>68</u> ,	calamity	16	37	55	19
defeat	48	56	42	43	crime	8	49	<u>30</u>	<u>) 8</u>
disappointment	49	5ძ	53	30	deformation	14	24	63	<b>9</b>
disobedience	<b>57</b>	24	65	21	destruction	27	51	63	63
dissatisfaction	n 52	18	27	106	discord	<u>80</u> .	53	35	89
enemies	33	26	91,	37	displeasure	103	37	28	135
failure	28	35	91,	11	dispute	58	49	35	45
fear	15	21	<b>2</b> 5	11	errors	31	59	41	39
guilt	15	15	31	37	fear	22	15	30	33
hate	102	55	60	<u>91</u> ,	hate	81,	54	65	128,
ignorance	<u>28</u>	24	52	46	injustice	28	46	35	41
injustice	87,	<u>90</u> ,	24	123	jealous	13	44	<u>69</u>	19
insult	<u>79</u> ,	106,	35	<u>86</u> .	lack of	105	<u>£1</u> ,	40	53
jealousy	<u>72,</u>	74,	28	<u>67,</u>	madness	64	37	67:	35
lie	17	54	27	<u>83</u> ,	murder	9	55	62	21
love	22	34	24	19	no friends	7	70,	44	14
nadness	38	25	34	11	pain	121	38	40	56
nickname	1	47	91,	2	quarrel	<u>98</u> .	<u>69,</u>	<u>70.</u>	56
no patience	53	<u>75,</u>	<u>70</u> ,	43	repentance	13	37	56	44
quarrel	83,	<u>69</u> ,	<u>73</u> ,	43	revenge	60	3 <b>9</b>	31	40
revenge	59	47	84,	54	roar of angel	18	37	37	53
ridicule	38	<u>69</u> .	29	5 <b>G</b>	self natred	36	37	49	116,
uneasiness	14	24	31	4.	sorrow	<u>17</u>	35	59	35
verbal scolding		32	97,	14	suicide	2,	2 <u>8</u>	45	<u>5</u> ,
weakness	18	47	40	20	temper	<u>66</u> ,	<u>78</u> ,	41	37
					violence	<b>93</b> ,	39	43	65
					W&I	43	32	62	51

-1.81

-0.67

0.58

0.37

Table 11

The Antecedents and Consequents of ANGER Presented According to the Rank Order of Their Frequencies

The Top Antecedents									
American	Greek	Indian	Japanese						
bad temper hate quarrel injustice insult betrayl contempt jealousy	insult injustice no patience jealoue quarrel ridicule	verbal scolding enemies failure nickname revenge quarrel no patience bad temper	betrayal injustice dissatisfaction hate insult lie contempt jealousy						
The Top Consequents									
pain lack of control displeasure quarrel violence hate discord animosity temper	lack of ontrol temper no friends quarrel	animosity quarrel jealousy madness	d: pleasure h.ce self-hatred						
Correlations Among Cultures (Based on Ante edents above and Consequents below diagonal)									
A	G	Ţ	J						
Α	.41*	03	.60***						
G .37*		11	.40*						
I06	.06		45**						
J .55***	.04	09	,						
* p < ** p < *** p <	.01 .001	Seaning Indices of	ANGER						

-2.09

-0.64

1.13

0.87

-1.84

-0.51

-0.39

0.59

 $\mathbf{z}_{_{\mathbf{E}}}$ 

z<sub>p</sub>

z<sub>A</sub>

С

-1.97

0.06

0.67

0.60

Japanese agree with the Americans (see Table :) and emphasize the deviation from appropriate conditions (betrayal, injustice, dissatisfaction, a lie) injury to self-esteem (insult), and frustration (jealousy).

Specially interesting are the As which have significantly high frequencies in some cultures and significantly low frequencies in other cultures. For the word ANGER we note, from Table 10, "hat the antecedents betrayal, contempt, injustice and jealousy are chosen significantly more frequently in American and Japan (and tend to be high in Greece) but less frequently than expected by chance in India. In Japan betrayal and injustice are considered extremely unethical acts, both in intempersonal relations and in politics. This explains the high frequencies of these As. Since injury-to-self-esteem appears to be the basic theme behind the responses of all but the Indians, it appears that some of the Hindu teachings have had some influence in "disconnecting" injury-to-self-esteem from anger. It may also be that the powerful influence of the Bhagwat Gita which explicitly states that frustration leads to anger, has influenced the Indians. On the other hand, a minority of the Indians must have adopted the injury-to-self-esteem theme, since it is reflected in the connection between a nickname and anger.

The latter finding is exceptionally interesting in view of the extreme cultural differences in the frequencies of the connection between nickname and anger (Table 10). Vassiliou and Shanmugam report that nicknames tend to be derogatory, insulting, or ridiculing in their cultures. Tanaka reports that nicknames are used in Japan mostly in intimate relationships.

Certainly, in America nicknames are rarely deliberately insulting. Thus, the frequencies reported in Table 10 are explained in terms of the relatively

endearing or derogatory qualities of the nicknames employed in the four cultures.

Turning now to the consequents of ANGER, we note that the basic themes in America and Japan (r = .55, p < .001) suggest a "displeasure with the imperfection of the personality" which has led to ANGER. All cultures see ANGER as leading to quarrel, lack of control, and to some extent to hate. But the American emphasis on pain and the Japanese emphasis on self-hatred suggest that it is a shameful event the twould cause a person to feel unhappy. In Japan a display of ANGER is strongly associated with "immaturity." Therefore, hate is directed at the ego, rather than the alter, for being unable to control it. The Greeks are mostly worried about losing their friends. On the other hand, the Indians are rather matter-of-fact about ANGER showing significantly low displasure, as a consequence of it.

In sum, the Americans and Japanese see in ury-to-self-esteem or deviation from appropriate conditions as leading to ANGER, but a person should perhaps be above such considerations and getting angry is an indication of an imperfection in the personality. The Greeks are not made unhappy by ANGER, but they do worry about its consequences. The Indians accept it as a natural consequence of frustration and feel no pain or displeasure in connection with it.

COURAGE. Affectively, courage is positively evaluated in all cultures. It is evaluated particularly highly in Japan, and not very highly in India. It is seen as powerful in Japan and Greece and less powerful in India. It is very active in America.

Bravery, fearles\_ness, idealism, leadership, power of determination, self-confidence, strength, and will-power receive frequent choices as antecedents in most cultures. The responses of all cultures are highly intercorrelated (see Table 13).

Character and dedication are American antecedents that are underchosen by other cultures. The Greeks do not show any idiosyncratic meanings. The Indians emphasize tact and a stable mind and encouragement as antecedents of COURAGE. It is notable that the Americans consider encouragement as a unlikely antecedent (Table 12). Finally, the Japanese emphasize a sense of justice and love as internal bases for courage. The American emphases appear to suggest an "individual basis of power" resulting in COURAGE, the Indian a "social basis" (encouragement) and also concern for "subtle power" (tact), while the Japanese emphasize the power that comes from the knowledge that one is right and from the awareness that he has good leadership.

The consequents of COURAGE are in all cultures bravery, progress, strength, success, and victory. All cultures agree that they are not death, defeat, failure, fear, foolhardiness, and insolence. Thus, the respondents around the world are similar and quite idealistic. The Americans emphasize the consequences of social recognition (respect, faith and honor) to a larger extent than the other cultures. The Greeks emphasize success (job success, and the by-passing of difficulties). The Indians emphasize

fame, honor, and praise (i.e., social recognition) but also de-emphasize

satisfaction and self-confidence. The Japanese are very low in faith, honor,

power and very high in fearlessness. The consequences of COURAGE, for the

Japanese, seem to be more "personal" then "impersonal."

For both Americans and Japanese we also note a circularity between the antecedents and consequences of COURAGE: both self-confidence and strength lead to COURAGE, which, in turn, leads to these two concepts.

Thus, these three concepts appear highly associated, in these two cultures. The duality of the point of view of the Indian consequents (social recognition, but no individual satisfaction) is probably reflected in their ratings on the semantic differential (relatively low evaluation and potency, and activity).

Table 12 Frequencies of Antecedents and Consequents of COURAGE

Antecedents					Consequents				
	Amer.	Greek	Ind.	Japanese		Amer.	Greek	Ind.	Japanese
anger	14	28	38	48	bavery	160,	85,	48	104,
braveru	115.	57	<b>73</b> ,	<u>71</u> ;	bypassing of	42	67,	39	26
					difficulties				7
character	<u>79,</u>	51	21	9	death	2	15	23	10
child rearing	3	28	<u>16</u>	<u>2</u> ,	defeat	7	13	18	10
dedication	<u>75</u> .	29	31	16	determination	<u>151</u> ,	82,	12	105,
encouragement	8	33	<u>75</u> ,	34	failure	2	9	12	19
endeavor	33	52	50	38	faith	<u>88</u> ,	43	41	28
experience	16	45	25	51	fa.me	11	51	118,	32
faith	<u>96</u> ,	62	47	68	fear	16	12	22	27
fear	8	11	11	24	fearlessness	47	45	30	<u>70,</u>
fearlessness	41	<u>70,</u>	<u>73</u> ,	<u>85</u> ,	fear of oppone	nt 13	47	39	20
God	35	51	33	17	foolhardiness	8	16	29	13
heredity	0	20	17	<u>1</u> ,	gain	29	26	49	11
nonesty	24	40	57	58	honor	66,	41	77	31
idealism	71	<u>81</u> ,	61	53	insolence	5	28	19	7
ignorance	3	31	31	<u>27</u>	job success	17	77,	72,	<u>16</u>
justice	15	45	23	68	job	13	31	47	65
knowledge	25	37	35	4.4	love	12	28	29	44
leadership	146	69	105,	110,	power	41	64	61	25
love	55	35	28	<u>73</u> ,	praise	24	42	<u>103</u> ,	34
power	35	52	67,	11	progress	<u>93</u> ,	90.	83,	141,
power of	57	80,	66	89,	refreshingness	19	40	56	33
determination									
respect	40	23	47	ő	respect	103	41	56	55
self-confidence			41	137	satisfaction	44	43	22	46
sense of just:		43	26	103,	self-confidence		<u>66</u> ,	24	<u>125,</u>
stable mind	31	60	<u>76,</u>	41	sense of superiority	19	48	50	34
strength	<u>91</u> ,	53	86,	102,	strength	133	<u>69</u> ,	70,	131,
stupidity	6	15	5,	<u>6</u> ,	Euccess	<b>83</b>	<u>74</u> ,	40	89,
tact	16	13	<u>103</u> ,	14	trust	34	49	51	63
will power	<u>97</u> .	84,	731	92,	victory	34	59	100,	84,

Table 13

The Antecedents and Consequents of COURAGE Presented According to the Rank Order of Their Frequencies

The Top Antecedents						
American	Greek	Indian	Japanese			
self-confidence	self-confidence	leadership	self-confidence			
leadership	will power	strength	leadership			
bravery	idealism	stable mind	sense of justice			
will power	power of	tact	strength			
-	determination	-				
faith	fearlessness	encouragement	will power			
strength	leadership	bravery	power of			
	•	•	determination			
character		fearlessness				
dedication		will power	fearlessness			
idealism		power	love			
			bravery			
	The Top Co	nsequents				
bravery	progress	fame	progress			
determination	bravery	praise	strength			
strength	determination	victory	self-confidence			
self-confidence	job success	progress	determination			
respect	success	honor	bravery			
progress	strength	job success	success			
faith	by-passing of	strength	victory			
	difficulties	000000	v.2000.y			
success	·•		fearlessness			
honor	self-confidence					
	Correlations A					
(Based C	ecedents above an	d Consequents below dis	igonal)			
A	G	I	J			
A	.72***	.41*	.68***			
G .70***		.43	***			
-	*	.43	.71 *			
I .02	.38	***	.38			
J ,78***	.70 <sup>***</sup>	.16				
* n < 05						

J	.78***	.70***	.16	***
	* p < .05 *** p < .001	Affective Meanin	g Indices of COURAGE	
z <sub>E</sub>	0.97	0.68	0.42	1,31
z <sub>p</sub>	1.40	1,75	0,92	2.23
<b>z</b> <sub>A</sub>	1.03	-0.00	-0.16	0.22
С	0.28	0.26	0.88	0.50

FEAR. In all cultures FEAR is affectively bad and passive. In Greece it is also low in potency, while in the other three cultures it is high. It is most familiar in Greece and in India, and less familiar in the other two cultures.

All cultures see FEAR as a consequence of danger and lack of confidence. America and Japan, but not India, see uncertainty (e.g. ignorance and the unknown) as antecedents of FEAR. It is possible that in industrial societies knowledge is seen as a way to reduce uncertainty and, therefore, fear, while in India this view has not yet become important. It is also possible that in India, with the extended family, one does not experience loneliness or uneasiness in connection with fearful circumstances, while in the industrial societies there are signs of alienation (i.e., loneliness, uneasiness).

India is the only culture where a demon, excess wealth, and lack of manliness, are seen as antecedents of FEAR. Fantasy is high in both Greece and India. In India, excess wealth, in the form of gold, may cause fear because if one has gold the government may confiscate it (Gold Control Order of the Government of India). The response to supernaturals is a strong antecedent in India and to some extent in Greece. Death is very high in Japan, as an important antecedent of FEAR. This is understandable in view of the political situation and the Japanese concern with war and peace.

In all cultures <u>fear</u> leads to <u>flight</u>, <u>panic</u>, and <u>uneasiness</u>. But the Americans, Greeks, and Japanese also mention freezing (<u>hesitation</u>) to which the Indians significantly disagree. The Americans emphasize <u>weakness</u> and <u>nervousness</u> as a consequent; the Greeks <u>failure</u>; the Indians a <u>bad dream</u>; the Japanese <u>shaking</u>.

We note that the Greeks and the Indians on the one hand and the Americans and the Japanese on the other hand, are more similar to each other in their antecedent-consequent meaning of this concept, though the Greeks are also similar to the Americans. This obliquely supports Hebb and Thompson's (1954) argument that culture creates a protective cocoon which reduces the fear that man may experience. Specifically, if knowledge is equated to industrialization, Hebb's argument would be translated into "the greater the knowledge, the lesser the fear." In America and Japan fear is caused by uncertainty (ignorance and the unknown), as well as by the conditions of "anomie" (loneliness, uneasiness) while in Greece, and to an even larger extent in India, it is caused by supernatural wants such as demons, and fantasy. The consequences are physiological in America and Japan, and indirect in Greece and India.

Table 14
Frequencies of Antecedents and Consequents of FEAR

Antecedents					Consequents				
	Amer.	Greek	Ind.	Japanese		Amer.	Greek	Ind.	Japanese
accidents	20	50	49	58	bad dream	14	23	<u>74</u> ,	31
blind belief	13	<u>19</u>	39	38	black magic	<u>2</u>	16	47	<u>3</u> ,
conscience	27	<b>59</b> .	26	16	cowardice	39	65	54	45
cowardice	88,	<u>93</u> ,	58	45	crying	<b>2</b> 2	24	54	33
crime	14	36	69	47	death	7	18	39	19
danger	<u>135</u> ,	<u>71</u>	<u>68</u> ;	<u>96</u> ,	defeat	31	57	6 <b>7</b>	36
darkness	55	32	81	56	enemies	25	24	21	45
death	31	29	37	121,	failure	25	74	58	28
demon	19	12	<u>90</u> ,	39	flight	164	63	137,	128,
disease	17	43	42	33	fright	105	33	42	<u>31</u>
enemies	28	37	45	46	hatred	35	34	33	25
excess wealth	1	33	103,	22	hesita ion	146	<u>66</u>	30	126
fantasy	22	<u>67</u> .	<b>78</b> /	33	illusions	34	<u>66</u> ,	66	44
rearfulness	47	<u>70</u> .	91,	6 <b>7</b>	inferiority complex	25	<u>80</u> ,	80,	28
hate	34	20	13	30	madness	11	40	31	25
human nature	28	45	47	34	mental worry	118,	63	44	<b>88</b> ,
ignorance	105,	57	14	84	nervousness	<u>74,</u>	65	50	<u>20</u> ,
lack of confidence	139,	<u>81,</u>	65	103,	no faith	50	64	43	45
lack of manliness	24	49	<u>77,</u>	<u>17</u>	no unity	40	57	<u>68</u> ,	39
lies	25	27	59	47	pain	34	35	14	11
loneliness	<u>89</u> ,	57	65	108	panic	<u>101</u> ,	104.	86,	48
love	<u>9</u> ,	32	13	24	ruin	20	58	53	40
mental disease	<u>6</u> ,	41	21	14	shake	16	19	19	151,
nerves	13	52	25	11	stagnation	12	21	19	39
pain	66	21	21	14	suicide	6	35	37	9
past life	<u>6</u>	47	15	10	trouble	89	31	56	114,
shock	<u>76</u> ,	46	37	37	turn of mind	34	36	37	84
superstition	<u>75</u>	37	37	10	uneasiness	134,	108:	35	151
uneasiness	80,	59	27	122	weakness	87,	37	46	23
unknown	166	64	30	108					Ĭ

Table 15

# The Antecedents and Consequents of FEAR Presented According to the Rank Order of Their Frequencies

### The Top Antecedents

American	Greek	Indian	Japanese
unknown lack of confidence danger ignorance loneliness cowardice uneasiness shock superstition	cowardice lack of confidence danger fearfulness fantasy	excess wealth fearfulness demon fantasy lack of manliness crime danger	unessiness death loneliness unknown lack of confidence danger ignorance

### The Top Consequents

hesitation uneasiness	uneasiness ¬ panic	flight panic	shake uncasiness
mental worry	inferiority complex	inferiority complex	flight
fright	failure	bad dream	hesitation
panic	hesitation	no unity	trouble
trouble	illusions		mental worry
weakness			
nervousness			

# Correlations Among Cultures (Based on Antecedents above and Consequents below diagonal)

	٨	C	<b>T</b>	•
	A	G	1	J
A		.56 <sup>***</sup>	03	.64***
G	.53***	***	. 23	.41*
	.34	.41*		.15
J	.62***	.27	.08	

\* p < .05 \*\*\* p < .001

### Affective Meaning Indices of FEAR

Z <sub>E</sub>	-1.61	-1.90	-1.82	-2.20
z <sub>p</sub>	0.33	-0.91	1.01	0.10
z <sub>A</sub>	-0.06	-0.96	-G.18	-1.32
С	0.72	0.59	0.98	0,49

LAUGHTER. Happiness, joy, humor, funry things, fun, the unexpected (traces of Freud!), and love are antecedents of laughter in all cultures. However, while most cultures also consider tickling a good antecedent, it is rejected as an antecedent in Japan. A comical event is also not likely to lead to laughter in Japan. Entertainment is significantly high as an antecedent only in Greece, while in America and Japan it is low.

For the Japanese LAUGHTER is very highly valued, and is associated with what is considered most desirable and refined, such as joy, happiness, humor, and satisfaction, rather than with what is less refined, such as tickling, comical events and entertainment.

The unique consequents of LAUGHTER for the Americans are noise, for the Greeks tears, for the Indians the stimulation to others to laugh, and for the Japanese joy, humor, happy feeling, health, love, and peace.

The Indians tend to emphasize physical-tangible antecedents (chain reaction, tickling) while the Japanese and the Americans emphasize pleasant mental states and the unexpected. The consequences of LAUGHTER are in India again tangible (a chain reaction), while ir Japan there is stain a not only pleasant but also a refined mental state.

Laughter in the semantic differentials is seen as good and active everywhere. All cultures except America also see it as weak. India has the most conflict, in our own data, but this may be because the same word means both "smile" and "laughter."

It is notable, that on the antecedents and LAUGHTER cultural similarities are substantial, while cultural differences are minimal. On the other hand, this is not as true for the consequences. The Indians are again most idiosyncratic.

Table 16

Frequencies of Antecedents and Consequents of LAUGHTER

Antecedents

Consequents

Antecedents					Consequents				
:	Amer.	Greek	Ind.	Japanese		Amer.	Greek	Ind.	Japanese
a peculiarity	46	53	51	40	anger	1	20	47	19
booze	6 <b>0</b>	47	36	54	calamity	1	24	36	2
chain reaction	<u>16</u>	15	71	40	entertainment	22	60	59	14
children's play	y 49	45	<u>70</u> ,	<b>3</b> 9	freedom	52	41	36	45
comical event	47	42	71	20	fun	9 <u>5</u> ,	79,	59	61
contempt	<u>2</u>	_8,	36	12	good time	<u>96</u> ,	87,	36	87
entertainment	24	<u>70</u> .		28	happiness	125,	57	52	<b>91</b> :
friends	35	<u>15</u>	38	54	happy feeling	<u>133,</u>	59	58	102,
fun	79,	47	58	31	hate	3	18	38	9
funny things	94,	<u>74</u> ,	<u>77,</u>	44	health	19	52	36	94,
good mood	46	<u>68</u> ,	52	41	humor	129,	58	65	110
good time	61	49	57	63	jokes	46	46	50	28
happiness	169	120,	53	146,	joy	<b>98</b> ,	49	41	121,
humo"	122,	<u>95</u> ,	64	<u>100</u> ,	laugh to deat	h <u>3</u>	54	47	<u>6</u> ,
idtocy	15	33	56	8	loneliness	9	29	46	65
insane person	O	7	64	5	love	24	46	33	<b>72</b> ;
irony	16	22	47	15	mental peace	59	63	49	57
jokes	52	64	60	40	misunderstand	- 4	47	50	<u>4</u> ,
					ing				
joy	131,	114,		<u>183</u> ;	noise	<u>172</u> ,	65	61	49
iove	50	45	41	<u>70</u>	peace	58	40	31	100
nervousne. 3	<u>5</u>	<u>26</u>	27	2	pleasantness	<u>67</u> .	55	60	80,
peace	12	37	25	65	rest	5	48	41	39
pleasant things	s <u>29</u>	27	30	<del>77</del> .	satisfaction	32	40	49	63
sadness	3	12	19	<u>6</u>	snamefulness	<u>3</u>	40	4.2	48
sarcasm	27	<u>28</u>	36	43	sign of sorro	w <u>5</u>	<u>13</u> ,	46	14
satisfaction	17	15	24	<u>90</u> ,	stimulation t			01	
	·				to laugh	39	41	91,	33
Success	15	22	24	<u>27</u>	stomach ache	4	22	39	7 9
the unexpected	78,	81,	46	<u>76,</u>	sympathy	8	40	38	
tickling	61	60	91	22	tears	42	71,	44	46
					vacancy	<u>8</u> ,	<del>17</del> ;	50	<u>29</u>

Table 17
The Antecedents and Consequents of LAUGHTER Presented
According to the Rank Order of Their Frequencies

### The Top Antecedents

American	Greek	Indian	Japanese
happiness joy humor funny things fun the unexpected	happiness noy the unexpected funny things entertainment good mood	tickling funny things chain reaction comical event children's play	joy happiness humor satisfaction pleasant things the unexpected love
	The Top C	Consequents	
noise	good time	stimulation to others to laugh	joy
happy feeling humor happiness toy good time fun pleasantness	fun tears		humor happy feeling peace health happiness good time pleasantness
			love

# Correlations Among Cultures (Based on Antecedents above and Consequents below diagonal)

	A	G	I	J
A		.90 <sup>***</sup>	.36	.76***
G	.64***		.36	.69***
I	.36	.22		10
J	.67***	.48**	04	
		1		
	** p < .01 *** p < .001			
		Affective Meaning	Indices of LAUGHTER	
Z. E	0.84	0.43	0,61	2.00

Z.E	0.84	0.43	0,61	2.00
$\mathbf{z}_{\mathbf{p}}$	0,42	-0.77	-1.38	-0.89
z <sub>A</sub>	1.42	0.31	1.49	2.88
С	0.35	0.24	0.63	0.12

### Cultural Differences on Political-Individual Concepts

FREEDOM. In all cultures FREEDOM is valued, but in Greece and Japan it is evaluated more highly than in America, and in India the evaluation is relatively low. In all cultures it is seen as potent and active, except in India where it is seen as passive.

The American and Japanese antecedents of freedom are quite similar (r = .91) and tend to emphasize individual freedom (e.g. faith, equality, respect for humor beings). The Greek and Indian antecedents of freedom tend to be similar (r = .44) and to emphasize the social or collective aspects of the concept (e.g. patriotism, discipline).

In Japan a "democratic" interpretation of this concept was popularized by the Americans after the war. Before the war FREEDOM connoted "dissoluteness" at the individual level, and "anarchy" at the societal level. It was an undesirable concept. Only after the war it became a positive concept. Thus, it is not surprising that the Japanese youth's view of FREEDOM resembles that of the Americans. An older Japanese sample would probably have given different results.

"Discipline" is an important antecedent in India and Greece, but is is significantly low in Japan. This reflects the notion that to achieve freedom a society "quires discipline, but to achieve individual freedom this is not quite as important. Wealth is not seen as an actecedent of freedom, in any culture. In other words, FREEDOM can not be bought.

Consistent with the above interpredation of the differences in the meaning of FRFEDOM are the consequency of this concept. The American and Japanese consequents are similar (r = .75) and emphasize individual

Indian consequents emphasize social and political aspects of the concept, such as democracy, divilization, and growth of civilization. The Greeks are intermediate, in this respect, between the Indians and the other two cultures. Another important contrast can be seen in the American and Japanese emphasis on responsibility as a major consequent of FREEDOM, while the Greeks and the Indians see no significant connection between these concepts. To the extent that "freedom is accompanied by responsibility," both the Americans and the Japanese appear to have adopted a social responsibility concept of self-regulated individual freedom. The fact that the Japanese see disorderly society as significantly dissociated from FREEDOM, indicates that they have departed from the tradition view of FREEDOM.

Table 18
Frequencies of Antecedents and Consequents of FREEDOM

Antecedents					Consequents				
	Amer.	Greek	Ind.	Japanese		Amer.	Greek	Ind.	Japanese
American	10	20	34	4	abuse	18	20	40	31
combat	<u>2</u>	39	34	<u>9</u> ′	civilization	<b>59</b>	134	60	35
courage	78,	51	48	100	courage	39	34	50	11
democracy	6 <b>2</b>	115,	57	71	crime	14	8	35	31
discipline	33	64	<u>73</u> ,	<u>4</u> .	degradation	7,	14	20	14
equality	111	73	40	108,	democracy	50	<u>75</u> ,	<u>79</u> ,	30
faith	115,	57	49	151,	disorderly society	10	30	47	29
freedom of speech	18	38	47	18	duty	<u>73</u> ,	49	58	136,
God	58	71	47	40	educational facilities	10	47	43	14
instinct	8	25	29	<u>20</u>	free speech	33	<u>79,</u>	54	51
liberation	85,	<u>67</u> ,	57	<u>104</u> ,	growth of civilization	52	97,	52	42
love	41	35	32	55	happiness	102	75,	39	151,
love of freed	om 39	76,	62	54	industrial production	2	24	55	<u>9</u>
money	4	21	43	13	irresponsibil	lity 9	19	57	41
patriotism	47	163	<u>69</u> ,	2	yoy	<u>88</u> ,	32	46	<u>131</u> ,
peace	36	82	46	<u>85</u> ,	knowledge	27	15	34	9
peace of mind	105	38	<b>68</b> ;	124,	life	<u>98,</u>	74;	34	32
power	20	24	37	27	love	29	39	36	33
quarrel	4	12	25	5	misuse	15	11,	56	18
respect for hi	uman 142,	51	63	131,	no restriction	ons 28	13	64	43
respect for individual	<u>154</u> ,	79,	52	137,	peace	88	<u>96</u> ,	48	113,
restriction	<u>6</u>	15	18	18	progress	62	103,	56	60
rights	41	34	48	44	public disord	ier <u>5</u>	15	49	<u>23</u> ,
servitude	4	29	43	10	respect	<b>58</b>	33	41	14
strength	72,	23	66	48	responsibilit	ty <u>123</u> ,	12	54	144,
suppression	<u>1</u> ,	14	34	21	rights	100,	43	43	80,
tact	4	13	65	<u>z',                                      </u>	satisfaction	41	20	40	79,
the constitut:		<u>79</u> ,	47	65 <sup>'</sup>	unity	32	40	56	13
unity	<u>1</u> c	28	69	12	wealth	15	18	41	15
war	,	11	34	$\frac{4}{2}$ ,	well being	<u>72</u> ,	<u>107</u> ,	45	29

Table 19

# The Antecedents and Consequents of FREEDOM Presented According to the Rank Order of Their Frequencies

### The Top Antecedents

A aerican	Greek	Indian	Japanese
respect for individual	democracy	discipline	faith
respect for human beings	patriotism	patriotism	respect for individual
faith	peace respect for individual	peace of mind	respect for human beings
equality peace of mind liberation courage	the constitution love of freedom liberation		peace of mind equality liberation
strength	liberation		courage peace

### The Top Consequents

responsibility happiness	civilization well being	democracy	happiness responsibility
rights	progress		duty
life	growth of		joy
	civilization		
joy	peace		peace
peace	free speech		rights
duty	democracy		satisfaction
well being	happiness		
	life		

# Correlations Among Cultures (Based on Antecedents above and Consequents below diagonal)

	A	G	I	J
A		.51**	.42*	.91 <sup>***</sup>
G	.46**	4.00	.44*	.46**
I	.06	.26		.25
J	.75	. 16	.09	=
	<pre>p &lt; .05 ** p &lt; .01 *** p &lt; .001</pre>	Affective	Meaning Indices of FREEDOM	
Z <sub>E</sub>	1.07	1.49	0.41	1.59
$\mathbf{z}_{\mathbf{p}}$	1.17	1.23	1.58	0.34
z <sub>A</sub>	0.89	1.16	-0.76	0.88
C	0.57	0.27	0.66	0.48

PEACE. This is a universal value, though it is evaluated much more highly in Japan and much less highly in Greece than it is in America or India. It is a potent, but passive concept.

There is a striking resemblance between the pattern of results obtained for FREEDOM and that obtained for PEACE. Again, Americans and Japanese generally (r = .64) agree with each other in that they both emphasize individualistic antecedents and consequents (r = .39) of PEACE, while the Greeks and the Indians agree with each other and emphasize societal consequents (r = .45). Specifically, the Americans and Japanese emphasize antecedents that suggest the existance of appropriate psychological states, such as kindness, cooperation, understanding, trust, and consequents that suggest serenity (tranquility, happiness, joy, etc.). The Greeks and the Indians give antecedents that suggest political or societal well-being (democracy, brotherhood, equality, no war, disarmament, and unity); and consequents suggesting states of general sociel well being (concordance, civilization, progress, increased standard-of-living, development, and well being).

All cultures consider FREEDOM an antecedent of PEACE, and this may be an explanation of the noticeable similarity in the patterns of results obtained with these two concepts. In addition, both the Greeks and the Japanese see FREEDOM as a consequent of PEACE. Going back to Table 19, we note that PEACE or PEACE OF MIND were given by all cultures as antecedents of FREEDOM, and PEACE was significantly frequently given as a consequent of FREEDOM in three out of four cultures. Thus, there is much evidence that the two concepts are seen as being closely interrelated in all cultures.

Turning to Table 20, we note certain antecedents on which the cultures give some unique patterns. Specifically, "brotherhood" is an antecedent in America and Greece and not in Japan. Perhaps the dominantly nonreligious Japanese see PEACE as unrelated to a concept that has religious connotations, such as brotherhood. Contentment is not an antecedent in Greece although it is relatively high in the other cultures. Perhaps the Greeks feel that contentment will lead to attacks by one's neighbors, hence to war. Cooperation is not an antecedent in India, democracy is not in America, nor is disarmament. Patience is irrelevant, according to the Greeks, but very important according to the Indians and unity is high for the Indians and low for the Japanese. In summary, the Indians seem to stress a more pragmatic approach to the causes of peace, such as disarmament, patience, and unity. In contrast, the Americans and Japanese tend to emphasize a more idealistic approach, to the same problem, such as cooperation, justice and understanding. This may be partly a reaction to the Sinc-Indian and Pakistan-India disputes. The Japanese are unique in stressing love, trust and happiness, as antecedents and brightness, concordance and love as well as joy and freedom as consequents. It is as though the Japanese subjects were reacting to the preamble of the Japanese constitution: "We desire peace for all time and are deeply conscious of the high ideals controlling human relationships and we have determined to preserve our security and existance trusting in the justice and faith of the peace-loving peoples of the world." Thus, the antecedent-consequent instrument, together with the semantic differential, reflect with some accuracy the bases of modern Japanese pacifism.

Table 20 Frequencies of Antecedents and Consequents of PEACE

Antecedents Consequents

Antecedents					consequents				
	Amer.	Greek	Ind.	Japanese		Amer.	Greek	Ind.	Japanese
brotherhood	<u>83,</u>	<u>75</u> ,	44	10	aloneness	<u>5</u> ,	13	23	20
contentment	<u>92,</u>	25	41	58	brightness	32	17	42	112,
cooperation	121,	47	28	110,	civilization	42	128	<u>73</u> ,	61
democracy	14	96,	<u>68</u> ,	35	concordance	58	144,	37	109,
disarmament	21	45	<u>110</u> ,	27	development	72,	80,	55	32
equality	54	<u>73,</u>	46	53	enjoyment	55	27	44	37
fear of death	<u>8</u>	12	16	<u>15</u>	equality	36	39	28	39
freedom	<b>69</b> ,	134	<u>85</u> ,	<u>98</u> ,	freedom	46	79	43	87,
free mind	32	62	50	42	friendship	81,	53	35	32
friends	10	21	36	12	good job	2	25	26	4,
good conduct	28	39	44	39	happiness	70,	53	<u>76</u> ,	136
good relations	40	48	50	18	honor	25	27	<u>28</u> ,	5,
good will	<u>77,</u>	48	34	40	increase in s	tandaı	-	,	
	-				of living	21	99,	<u>96</u> ,	43
happiness	5 <b>7</b>	55	<b>6</b> 6	104,	joy	46	35	71,	100
honesty	61	54	15	63	love	48	52	40	91,
justice	74,	<u>76,</u>	37	100	no worry	39	22	51	37
kindness	142	50	59	<b>7</b> 8	pleasantness	26	17	38	11
knowledge	19	18	34	22	progress	44	102	60	39
logic	20	59	17	12	quietness	47	52	95,	39
love	49	57	36	125	relief	29	21	39	15
no war	28	<b>58</b> <sup>'</sup>	117,	36	security	<u>107</u> ,	39	64	52
observing	23	30	56	22	serenity	56	41	38	60
non-violence	-								
patience	35	27	<u>75</u> 1	52	stable life	42	36	52	58
self-determina tion	- 12	38	58	12	tedium	2	<u>8</u> ,	18	<u>29</u>
tranquility	39	19	40	16	tolerance	<u>78,</u>	<u>5</u>	46	34
trust	52	28	25	110,	tranquility	127	49	60	91,
understanding	117,	35	53	124,	understanding	65	16	38	47
unity	45	63	89,	25	unity	81,	27	40	22
war	10	14	11	23	well being	54	<u>65</u> ,	59	41
	,	1	,	•	work success	1	31	29	3,

-0.47

0.66

Table 21

The Antecedents and Consequents of PEAC:
According to the Rank Order of Their Frequencies

### The Top Antecedents

American	Greek	Indian	<b>Jap</b> anese
kindness	freedom	no war	love
cooperation	democracy	disarmament	understanding
understanding	justice	unity	cooperation
contentment	brotherhood	freedom	trust
brotherhood	<b>⊘quality</b>	patience	happiness
good will		democracy	justice
justice			freedom
freedom			

### The Top Consequents

tranquility	concordance	increase in standard of living	happiness
security	civilization		brightness
friendship	progress	quietness	concordance
rmity	increase in	happiness	joy
	standard of living		
tolerance		civilization	love
development	development	joy	tranquility
happiness	freedom		freedom
	well being		

# Correlations Among Cultures (Based on Axtecedents above and Consequents below diagonal)

A	A 		C .22	I 06	J +.64
G	. 13		<b>6 - 5</b>	.38	.27
1	.33		.45**		03
J	.39*		.36*	.36*	~~~
	* ** **	p < .05 p < .01 p < .001	Affective Meaning	ng Indices of PEACE	
z <sub>e</sub>	1.44		0.93	1,27	2.01
$\mathbf{z}_{\mathbf{p}}$	0.75		0.96	0.43	1,43

-0.06

0.28

0.89

0.92

 $z_A = 0.12$ 

C 0.46

### Philosophical Concepts

TRUTH. This concept is positively evaluated in all cultures, but more so in the two Eastern than in the two Western cultures. It is more potent and active in Greece and least potent as well as passive in Japan.

All four cultures do not see this concept in its philosophic context (e.g. to understand correctly the nature of reality), but rather in its interpersonal context of "telling the truth." All cultures see personal morality (integrity, honesty, sincerity, trust) as an antecedent of TRUTH. The cultural differences in the antecedents are too subtle to be easily interpretable. They include respect for the Americans, but not for the Japanese; good upbringing and devotion to God for the Greeks, but not for the Japanese; and courage and love for the Japanese but not for the Indians, The Indians do not have a characteristic pattern.

The consequents of TRUTH in all cultures may be described as "individual uplifting" and satisfaction. The individual improvement is particularly strong in America where almost all the consequents may be categorized as individual (courage, self-confidence, etc.). In the other three cultures the consequents include some societal themes (progress of society, progress, which in Greece is a societal concept). In all cultures there are also themes of appreciation by others (respect, friendship, fame) and in Japan there is a suggestion of aesthetic satisfaction (beauty).

In general, TRUTH appears to be a concept on which all cultures have relatively similar meanings (most intercorrelations of Table 23 are significant), with variations in emphases. The Japanese are unique in deemphasizing God-related antecedents and consequents, and in their emphasis on love and heauty. Truth is linked with poetry, courage and scientific evidence in a pattern not found in the other cultures.

Table 22
Frequencies of Antecedents and Consequents of TRUTH

Antecedents					Consequents				
	Amer.	Greek	Ind.	Japanese		Amer.	Greek	Ind.	Japanese
beauty	34	45	36	92	oppreciation of God	51	103,	82	24
character	75	93,	109,	<del>7</del> ,	beauty	79	42	34	<u>130</u> ,
courage	85	51	48	145	courage	97	74	73	107,
devotion to Go	d 67	100	74	47	frme	<u>3</u> ,	<u>35</u>	99	13
expected condu	ict <u>16</u>	60	81	24	friends	69	50	60	53
faith	89	62	72	108	friendship	134,	<u>103,</u>	84	120,
fear	3,	38	64	20	God	59	62	75	42
friends	34	65	45	63	hate	<u>6</u> ,	13	40	20
God	79	59	70	63	honesty	<u>151</u> ,	106	83	104
good companionship	20	57	88	49	honor	61	64	87	10
good man	61	126	63	45	joy	11	101,	77	95
good upbringin	g 59	138,	80	<u>10</u>	justice	169	109,	101,	138
habit	1,	51	59	<u>8</u>	knowledge	63	27	48	25
honesty	<u> 197</u>	123,	<u>103,</u>	<u>167,</u>	Leadership	<u>8</u>	26	90	<u>15</u>
integrity	224	47	122,	<u>119</u> ,	love	96,	84	44	161
intelligence	23	45	47	<u>38</u>	morality	<u>120</u> ,	87	107,	65
justice	<u> 157</u> ,	71	73	186	no hardship	9	64	78	13
kindness	37	36	83	<u>29</u>	peace	38	48	44	89
knowledge	64	28	45	<u>40</u>	profit	26	38	55	18
love	86	58	58	143	progress	34	98,	71	96
love of truth	66	<u>143,</u>	<u>95</u> ,	148,	progress of society	87	<u>143</u> ,	111,	112
morality	33	112,	<u>100,</u>	92	punishment	3	30	31	25
peace	10	54	60	<u>37</u>	relief	22	<b>58</b> <sup>′</sup>	50	16
reliance	10 45	34	76		respect	<u>160</u>	85	99,	109,
respect	<u>154</u> ,	88	62	49	satisfaction	107,	97,	60	125,
scientific evidence	30	22,	42	กย่	se'.f- confidence	<u>96</u> ,	78	71	105,
search	16	17	66	30	sound thought	s 82	51	97,	115,
sincerity	114	<u>158</u> ,	<u>98</u> ,	137	success	69	114,	76	66
strength	<u>5,</u>	31	53	27	trust	183	78	80	209,
trust	129	75	98,	<u>139</u> ,	wealth	28	18	52	11

Table 23

# The Antecedents and Consequences of TRUTH Presented According to the Rank Order of Their Frequencies

### The Top Anteceder.+?

American	Greek	Indian	Japanese
integrity honesty justice respect trust sincerity	sincerity love of truth good upbringing good man honesty morality devotion to God character	integrity character honesty morality sincerity trust love of truth	justice honesty love of truth courage love trust sincerity integrity faith

### The Top Consequents

trust	progress of society	progress of society	trust
justice	success	morality	love
respect	justice	justice	justice
honesty	honesty	fame	beauty
friendship	appreciation of God	respect	Batisfaction
morality	friendship	sound thoughts	friendship
satisfaction	joy	_	sound thoughts
courage	progress		progress of society
love	satisfaction		respect
self-confidence	ce		courage
			self-confidence
			honesty
			peace

# Correlations Among Cultures (Based on Antecedents above and Consequents below diagonal)

	4	G	I	J
A		.37*	.53**	. 70 <sup>***</sup>
G	.56***	**************************************	.51**	.29
I	. 40*	.54**		.24
J	.7;***  * *P < .05  ** p < .01	.55**	.15	
	*** p < .00	l Affective Mea	ning Indices of TRUTH	
z <sub>E</sub>	0.48	0.69	1.25	1.20
z <sub>p</sub>	1,52	2.27	1.18	0.91
z <sub>A</sub>	0.23	0.47	0.44	-0,57
С				

### Societal Control

PUNISHMENT. The unstandardized responses of the Greeks on the evaluative factor of the semantic differential show that this concept is seen as good by them, while it is seen as bad in all other cultures. On the standardized scores it is clear that the two Eastern cultures consider it much more "bad" then do the two Western cultures. It is "impotent" in Greece and most "potent" in India; it is passive all around the world, but most passive in Japan.

In all cultures "defiance of law," "illegal acts," and "lawlessness" are important antecedents and "regret" and "repentance" are important consequents.

The Americans are unique in emphasizing that "naughtiness" may lead to punishment. We suspect that this concept is not easily translatable into other languages to convey the same connotation in non-English cultures as does the English word to Americans. The Greeks are unique in their emphasis of "no God" as an autecedent. The Indians are unique in emphasizing "theft." Japan is unique because it de-emphasizes antecedents that are quite important in other cultures. Thus, "bad conduct," "conscience," "disobedience," and "poverty" are significantly low in Japan, when they have substantial frequencies in other cultures. The dissociation of defiance of law and disobedience from punishment may indicate some resistence of the Japanese youths to tradition and the status quo. Students, such as the subjects of the present study, often engage in militant student movement activities which defy law and constitute disobedience to established authority. Most of the participants in such movements may not accept that

they "disturb the peace" even though they are quite aware that they defy law and disobey authority. It is probable that they would not accept punishment resulting from such defiance and disobedience.

The consequents of PUNISHMENT tend to be correlated (r = .57) in America and Japan and suggest guilt (guilt, introspection); shame appears to be the dominant. theme ... in Greece and India (exemplification, dishonor), though both types of themes are present in all cultures. Greece is unique in that it emphasizes positive outcomes of PUNISHMENT (justice, reasonableness) and America is unique in emphasizing the non-acceptance of PUNISHMENT (resentment, resistance). The positive outcomes emphasized by the Greeks are consistent with their positive evaluation of this concept on the semantic differential, while the non-acceptance theme of the Americans appears unrelated to their remantic differential judgments. The Greek acceptance of PUNISHMENT is consistent with their evaluation of the imposition of societal controls on the indi idual and their acceptance of ingroup authority figures (Triandis and Vassiliou, 1967). The Japanese also accept, mishment, but this is more related to the concepts of correction and introspection, while the Greek acceptance is closer to the concept of the individual needing to be controlled through punishment.

Table 24

### Frequencies of Antecedents and Consequents of PUNISHMENT Anter:edents Consequents Amer. Creak Ind. Japanese Amer. Greek Ind. Ja, nese bad conduct 93, 75, anger bad deeds 92, change of behavior conscience compliance 103, crime 149. \$6, contempt deceit correction 104, defeat crime <u>43</u> definace of law 173, 77, 83, death disobedience 145, 80: dejection disturbance of 137; dishonor 141, 81, peace evil 4.0 exemplifi-181, cetion exemplifi-fear 2ა cation hate guilt 103, 132, illegal acts 93, hardship 8C, immoral acts hate imprisonment imprisonment 145, injustice 70, introspection 145, 114, law justice lawlessness 111, pain lie poverty 88, mistake reasonableness murder 87, reform naughtiness 202, 121, regret 114, 125, no God 69, repentance 90, 71, 72. pain repetition of <u>15</u> error poverty resentment 111, sin 80/ resistance theft <u>71</u>, revenge

transgression

unfair acts

wrong

98,

sin

wronged

Table 25

# The Antecedents and Consequences of PUNISHMENT Presented According to the Rank Order of Their Frequencies

### The Top Antecedents

American	Greek ,	Indian	Japanese
naughtiness	illegal acts	murder	disturbance of peace
defiance of law. crime disobedience disturbance of peace lawlessness illegal acts bad conduct	defiance of law injustice no God unfair acts	disobedience defiance of law bad conduct theft	injustice unfair acts crime illegal acts bad deeds immoral acts

### The Top Consequents

exemplification	imprisonment	introspection
regret	dishonor	regret
compliance	hardship	correction
justice	repentance	guilt
repentance	_	repontance
reasonableness		
change of		
behavior		
	regret compliance justice repentance reasonableness change of	regret dishonor compliance hardship justice repentance repentance reasonableness change of

exemplification reform

# Correlations Among Cultures (Based on Antecedents above and Consequents below diagonal)

A	G	I	J
	• *** • 55	.39*	:30
.20	₩ ₩ ₩	.39*	.41*
.13	-,01		.06
.57***	.13	13	<b>_</b> ==>
	.20 .13	.20 .1301	55*** .39* .2039* .1301

p < .05
\*\*\* p < .001</pre>

### Affective Meaning Indices of PUNISHMENT

z <sub>e</sub>	-1.26	-0.51	-1.54	-1.68
z <sub>p</sub>	-0.17	-0,43	0.87	0.16
z <sub>A</sub>	-0.29	-0.08	-0.57	-0.85
С	0.77	0.65	1.03	0.85

### Social Disruption

CRIME. This concept is a disvalue in all cultures, particularly in Greece. It is seen as potent everywhere except in Greece. It is active in America and Japan and passive in Greece and India.

The American and the Indian antecedents are correlated .59 and involve specific crimes (murder, stealing) while the other two cultures emphasize bad heredity (criminal instinct) and bad environment (bad company). The Greeks and Indians are negatively correlated ( -.42) because of large disagreements on the importance of criminal instinct, lack of food, murder, and poverty. All cultures, except India, see a flaw in the personality (loss of control, anger, hate) as re evant. Poverty is seen as an antecedent of crime only in America and India. The Greeks are significantly low, thun emphasizing the existing environmental pattern, where there is a rearead poverty, but a low reime rate. Finally, the Indians emphasize the importance of lack of food, which is never seen as important by the other cultures. Significantly, none of the other cultures currently have serious food problems. It is also notable that in Japan lie is seen as a crime, while in Greece it is not. Greeks believe that face-saving lies are highly desirable, and at any rate most acceptable. Significantly, also in Greece, Murder is not necessarily seen as a crime. This is a culture where killing "for honor" is still a significant cultural value, and such murders would not be considered crimes. While desire, which is usually negatively evaluated in Japan with regard to sexual activities as well as material desires, is associated with CRIME only in Japan, need is not related to it. Such a view appears consistent with the Japanese version of Buddhist stoicism.

Poverty of politics, a Japanese-generated antecedent, was chosen frequently only in Japan, as expected. It is an idiomatic expression suggesting the inadequancy of politics to improve the country. Robbery and stealing are not necessarily seen as crimes in Greece. This probably reflects the tradition of guerrilla fighters who for three hundred years opposed the Turkish occupation of the country. These guerrillas were called "kleftai kai armatoloi" which literally means "arms-carrying thieves," a definition very close to that of the robber. They were instrumental in liberating the country from the Turks, and hence are popular heroes.

All cultures see crime followed by <u>punishment</u>. The Americans and the Japanese generally view the consequents in personal terms (<u>unhappiness</u>, <u>guilt</u>, <u>sadness</u>, <u>arger</u>, <u>fear</u>) and also emphasize social disorganization. The Americans and the Indians emphasize social retaliation (<u>dishenor</u>, <u>imprisonment</u>, <u>execution</u>, <u>bad name</u>). The Greeks and the Japanese also emphasize the dark side of individual life (<u>sin</u>, <u>misery</u>, and the <u>spoiling</u> of life), which result from crimes.

Table 28 Frequencies of Antecedents and Consequents of CRIME

Antecedents					Consequents				
	Amer.	Greek	Ind.	Japanese		Amer.	Greek	Ind.	Japanese
anger	<u>64</u>	75	41	56	anger	13	<u>26</u>	19	77,
bad company	<u>59</u> ,	91,	<u>73</u>	<u>91</u> ,	bad name	25	58	95,	16
character	9	39	31	<u>29</u>	banishment	<u>11</u>	42	21	<u>16</u>
cheating	59	34	90	57	contempt	51	64	35	48
criminal instinct	60	<u>50</u> ,	16	<u>87,</u>	criminals	58	33	32	46
desire	58	23	58	103,	criminal is made an example	8 le of	40	40	12
disobedience	51	20	64	13	death	3	25	25	10
fear	29	23	<b>^1</b>	51	destruction of criminal		56	15	6
hate	<u>83</u> ,	57	<u>26</u>	<u>127,</u>	dishonesty	98	92	19	27
heredity	4	30	25	3	dishonor	119	33	99,	54
honor	<u>6</u>	50	8	20	execution	6	37	101	<u>9</u> ,
immorality	53	36	40	105,	fear	56	36	18	73,
inadequate education	53	43	42	45	fine	4	1.6	<u>91</u> ,	5,
lack of 100d	14	21	<u>68</u> .	25	guilt	<u>76,</u>	41	63	48
lie	44	29	60	<u>71</u>	hate	29	37	33	65
loss of contro	1 127	72	33	81	imprisonment	57	47	166	37
low .intelligen	ce <u>27</u>	48	25	46	insanity	<u>c</u>	31	17	16
mental disease	9	46	<u>10</u>	12	justice	31	53	12	26
money	<u>8</u>	46	31	53	lack of respec	et <u>72,</u>	32	48	1.6
murder	125,	<u>27</u>	121,	64	misery	64	68	35	<u>89</u> ,
need	74,	48	62	<u>25</u>	pain	48	34	17	22
perversity	32	47	18	<u>3</u>	police	19	2:	<u>29</u>	30
poverty	<u>69</u> .	29	77	39	punishment	105,	<u>78</u> ,	139	112,
poverty of politics	<u>8</u>	49	18	<u>71</u> ,	reprenance	21	55	25	100,
revenge	75,	<u>73</u> ,	44	<b>5</b> 5	adnedd	38	24	60	88,
robbery	113,	26	94,	33	sin	113	<u>69</u> ,	62	143,
sex	6	<b>5</b> 3	50	29					
speed	4	31	49	<u>1</u> ,	social disorde	er 140	. 39	<u>23</u>	117
stealing	<u>110</u>	27	<u>97,</u>	42	spoiling of l	ife 55	108	45	<u>78</u> ;
uneasiness	17	<u>77</u> ,	38	51	unhappiness	<u>106</u> ,	59	46	110

Table 27

# The Antecedents and Consequences of CRIME Presented According to the Rank Order of Their Frequencies

### The Top Antecedents

American	Greek	Indian	Japanese
loss of control murder robbery stealing hate revenge need poverty	bad company criminal instinct uneasiness anger revenge.	murder stealing robbery cheating poverty bad company lack of food	hate inmorality desire bad company criminal instinct loss of control lie poverty of politics
	The Top Co	onsequents	
social disorder	spoiling of life	imprisonment	sin
dishonor	dishonesty	punishment	social disorder
unhappiness	punishment	execution	punishment
punishment	sin	dishonor	unhappiness
dishonesty	misery	bad name	repentance
guilt lack of respect		fine	micery sadness
Taux of Teapeet			spoiling of life
			anger
			fear

# Correlations Among Cultures (Based on Antecedents above and Consequents below diagonal)

	A	G	1	J
A		.06	*** *59	. 42
G	, 40 <sup>*</sup>	***	<b>42</b> *	.34
I	.22	.07		.04
J	.64***	.35	<b>.</b> 06	
	* p < .05 ** p < .01 *** p < .001	Affective Mea	aning Indices of CRIM	3
z <sub>E</sub>	-2.83	-3,02	-2.42	-2.54
z <sub>p</sub>	0.51	-0.55	0.1.	0.65
z <sub>A</sub>	0.09	-0,61	-0.64	0.41
С	0.50	0.69	0.92	0.59

### Achievement

KNOWLEDGE. This concept is a universal value and it is seen as very potent, particularly in Greece. On the other hand, while the Greeks sec it as very active, the Indians see it as rather passive.

The Indian scmantic differential judgments on the active-passive dimension are reflected in the Indian antecedents which are rather passive. Only schooling, a clear mind, and necessity are listed as the Indian entecedents. They are rather passive. According to Shaumugam, clear mind means lack of confusion, no emotion, or "noise in the system." This contrasts with an inquiring mind emphasized by the other three cultures. We also note the emphasis on individual motivation (curiosity, will, desire, will power) in the other three cultures. It is as though the Americans, Greeks, and Japanese emphasize what the individual has to do or what kind of a psychological state he must actively seek in order to acquire knowledge, while the Indians emphasize that all that is needed is opportunity (schooling) and an open mind. We further note that the American and Japanese antecedents are much more differentiated than the Indian. The introspective attainment of knowledge is apparently seen as possible in India but definitely not in the other three cultures (see responses to aloneness, Table 28). Experience is seen as an important antecedent in America and Japan, but not in Greece. Lemory is seen as an antecedent of average importance in all cultures exacpt America. Possibly the American emphands on creativity rether thus memorization of materials is behind this response pattern. Necessity leads to KNOWLEDGE in the two Eastern cultures and does not in the two Western cultures. Travel is an antecedent of average importance in Greece and

India but of no importance in America and Japan. This could reflect the fact that one can learn much without traveling abroad in the latter two countries, while in the former the accepted pattern of completion of one's education requires a trip.

For the Japanese, the various achievement motives (effort, experience, study) and the closely relevant internal (curiosity, inquiring mind, will and will power) and external (necessity) factors are the major antecedents of acquiring knowledge. The Japanese appear to be strongly motivated to acquire knowledge, and to "catch up with the West."

The consequents of KNOWLEDGE show substantial cultural differences.

Only the Americans and the Japanese agree (r = .63). The Indians see

KNOWLEDGE as leading to the acquisition of status (sense of superiority,

power, prestige, fame, good job), while the other three cultures see it as

leading to personal improvement (easy adjustment, self-confidence, good

judgment, and calm judgment progress, advancement). The Greeks see a

substantial societal benefit (progress, peace, success, education).

For the Japanese, KNOWLEDGE as a cause of personal status and well-being is totally rejected, as can be seen from the significantly low frequencies of power, prestige, respect, fame, good job, and well being.

Instead they place the major emphasis on progress and advancement and the factors leading to them (calm, good judgments, easy adjustment, self-confidence and understanding). Both antecedents and consequents taken together suggest that the Japanese appear to maintain the traditional values of hard work in order to achieve progress via the acquisition of knowledge.

Table 28
Frequencies of Antecedents and Consequents of KNOWLEDGE

Amazinistanan									
Antecedents					Consequents				
	Amer.	Greek	Ind.	Japanese		Amer.	Greek	Ind.	Japanese
ability	60	12	42	48	ability	108	39	58	45
aloneness	<u>5</u>	11	40	<u>9</u> ,	advancement	78,	9,	60	<b>92</b> ,
attention	18	51	23	19	aloneness	3	13	0	9
books	<u>21</u>	46	55	33	brains	13	60	14	<u>21</u>
brains	21	51	23	52	calm judgment	53	30	32	<u> 133</u> ,
clear mind	22	49	72	<u>6</u>	character	31	46	٤.	; •
common scare	56	9	65	37	culture	33	55	<u>15</u>	821
curiosity	92	43	50	88,	easy adjustmen	nt <u>138</u>	59	50	109,
desire	105	79	52	67	education	57	<u>78</u> ,	32	15
effort	55	56	51	<b>76</b> ,	erudition	13	65	17	3.3
endeavor	41	52	51	22,	fame	<u>1</u>	35	76	17
experience	88,	29	49	134,	good job	4	49	<u>75,</u>	17 9
good companions	s <u>3</u>	61	40	7,	good judgment	55	67	48	138
good conduct	2	32	41	1	intelligence	58	41	29	56
inquiring mind	123,	81,	62	<u>160</u> ,	joy	41	37	76,	<u>82</u> ,
intelligence	85	59	64	65	learning	65	32	32	<u>30</u>
memory	20	59	32	40	peace	44	68,	42	33
motivation	164	12	24	34	power	26	24	82,	14
necessity	18	11	68	<u>91</u> ,	prestige	8	36	<u>77,</u>	24
peace	8	61	18	1	progress	90,	92	66	<u>91</u> ,
ading	23	58	43	48	religiosity	11	63	20	1
schooling	25	37	<u>76</u> .	<u>2</u>	respect	36	54	63	13
science	18	36	58	42	ruin	4	<u>9</u>	52	21
study	<u>76</u> ,	84	52	<u>111</u> ,	self-confiden	ce <u>112</u>	74	39	121
teaching	20	34	31	12	sense of superiority	<u>6</u>	32	83,	32
travel	14	42	64	12	success	65	73	40	32
understanding	115,	30	49	12 69	understanding	132,	42	50	125,
will	24	84,	43	72,	well being	43	42	55	<u>17</u> ,
will power	34	104	66	109/	wide knowledge	12	<u>27</u>	9	67
wisdom	81,	20	37	34	wisdom	<u>95</u>	56	32	44

Table 29

# The Antecedents and Consequences of KNOWLEDGE Presented According to the Rank Order of Their Frequencies

### The Top Antecedents

American	Greek	Indian	Japanese
motivation inquiring mind understanding desire curiosity experience intelligence wisdom study	wil' power s'ady 1311 inquiring mind desire	schooling clear wind necessity	inquiring mind experience study will power necessity curiosity effort will understanding
	M	to the second will be	

### The Top Consequents

easy adjustment	progress	r se of ∴æriority	good judgment
understanding self-confidence ability wisdom progress advancement	education self-confidence success peace	prestige fame joy good job	calm judgment understanding self-confidence easy adjustment advancement progress culture joy

# Correlations Among Cultures (Based on Antecedents above and Consequents below diagonal)

	A	G	I	J
A		.00	.04	*** .55
G	.32		.09	<b>,</b> 46 <sup>**</sup>
1	-, 01	21		.28
J	.63***	.13	03	
	** p < .05 *** p < .001	Affective Meaning	Indices of KNOWLEDGE	
z <sub>E</sub>	1.17	1.20	1.01	0.52
z <sub>p</sub>	1.55	2.46	1,63	1.00
$\mathbf{z}_{\mathbf{A}}$	-0.26	0.51	-0.36	-0.14
С	0.42	0.35	0.80	0.50

**POWER.** This concept is a strong value in the two Western countries, but it is not in the two Eastern countries, particularly in Japan. On the other hand it is potent in all cultures (this is, of course, tautological). Finally, it is active in all cultures, except India.

Intelligence, knowledge, leadership, and strength are seen an important antecedents of power in all cultures. The Greeks see POWER as acquired through competition with members of one's outgroup with the help of one's friends. The Indians are unique in their emphasis of physical as well as psychological power. This difference in points of view results in a large conflict index on the semantic differential judgments, as it should. The negative evaluation of POWER by the Japanese is reflected both in the antecedents (desire to rule, dictatorship,) and the consequents (enemies, dictatorship).

Both Eastern cultures emphasize some negative consequents of POWER (enemies, dictatorship, pressure). All cultures emphasize some positive consequents such as influence, pride, strength, and superiority. The Greeks contrast with the Japanese in emphasizing courage, glory, success and victory while the Japanese de-emphasize them as consequents of POWER. The Greeks are unique in their emphasis of freedom, glory, self-confidence, and victory as consequents of POWER while the other three cultures see weak connections between POWER and these consequents. The Japanese responses seem to have been conditioned by a disillusionment with the Japanese involvement in the last World War as can be seen by the responses to war as a consequent of POWER, which is not seen as such in the other three cultures, and the weak relationship between the concepts POWER and success for the Japanese sample.

It appear, clear that the Japanese perceive as the dominant source of power organization (organization, leadership), wealth (wealth, money) and collective action (dictatorship, desire to rule, force), while they consider as the major results of power regimentation (control, influence, pressure and dictatorship) and conflict (enemies, struggle, war). Also note that the Japanese dissociate power from respect, success, victory, freedom, and glory, which are frequently mentioned consequents in other cultures. Although on many concepts the Americans and the Japanese agree, on the concept of power there is considerable disagreement. While Americans see it positively, as a source of control, influence, superiority, and pride, derived from knowledge, leadership and strength, the Japanese reject it as a source of conflict and regimentation resulting from dictatorship and plutocracy.

Table 30 Prequencies of Antecedents and Consequences of POWER

Antecedents					Consequents				
	Amer.	Greek	Ind.	Japanese		Amer.	Greek	Ind.	Japanese
ability	65	63	39	82	control	154	29	43	127,
competition	48	<u>71</u> ,	34	<u>83</u> ,	courage	53	84,	64	26
desire to rule	23	54	42	118 <sub>i</sub>	cruelty	5	33	40	17
dictatorship	32	11	58	114,	descruction	8	12	41	31
eating eggs	2	13	45	1,	dictatorship	11	11	55	103
endeavor	35	104	29	27	egotism	24	51	42	51
exercise	<u>5</u> ,	84	51	<u>5</u>	enemies	42	42	<u>80,</u>	74,
friends	17	<b>69</b> ,	40	<u>5</u> 2	fear	56	27	66	59
force	59	50	53	88,	freedom	10	82	22	12
guns	15	47	<u>76,</u>	14	glory	17	76,	61	31
hard work	52	58	57	<u>5</u>	good job	4	42	29	31
heredity	2	15	33	<b>o</b> ʻ	government	14	15	30	59
influence	64	27	61	23	imposing will	95,	76,	<u>26</u>	52
instinct	<u>9</u>	32	32	41	influence	154	49	104	74
intelligence	<u>96</u> ,	67,	40	50	money	13	10	52	22
knowledge	134	56	35	57	pressure	43	11	64	121,
leadership	178,	<u>75</u> j	34	118,	pride	102	101	52	<u>70</u> ,
money	37	27	55	84,	respect	71,	65	51	22
muscles	18	44	55	52	self-confidence	60	100	38	41
nutritious food		43	82	<u>1</u> ,	selfishness	10	18	45	64
organization	65	55	39	<u>111</u> ;	strength	<u>138</u> ,	76,	<u>87</u> ,	<u>87,</u>
play	<u>o</u>	30	32	3	struggle	<u>30</u>	38	35	63
preparation	33	<u>15</u>	38	<u>3</u> ,	subserviance	46	26	39	36
respect	98,	40	53	49	success	76,	100	51	19
running	7	25	31	34	superiority	<u>131,</u>	<u>85</u> 1	72	83,
self-confidence	60	<u>67</u> ,	27	63	vanity	19	18	52	38
strength	175,	62	<u>90</u> ,	<u>114</u> ,	victory	33	<u>96</u> ,	40	29
unity	54	43	71,	35	war	8	20	20	57
wealth	54	22	68	<u>101</u> ,	wealth	31	<u>15</u>	39	33
wrestling	12	36	50	23			•		

Table 31

The Antecedents and Consequences of POWER Presented According to the Rank Order of Their Frequencies

### The Top Antecedents

Ame	rican	Greek	Indian	Japanese
lea	dership	endeavor	strength	desire to rule
	ength	exercise	nutritious food	leadership
	wledge	leadership	guns	dictatorship
	pect	competition	unity	strength
	elligence	friends	wealth	organization
		intelligence		wealth
		self-confidence		force
				money
				competition
				ability
		The Top	Consequents	
con	trol	pride	influence	control
inf	luence	self-confidence	strength	pressure
	ength	success	enemies	dictatorship
	eriority	victory	superiority	strength
pri		superiority		superiority
_	osing will	courage		enemies
	cess	freedom		influence
res	pect	glory		pride
		imposing will		
		strength		
	<b>(</b> D		tions Among Cultures	35= . <b>.</b>
			ve and Consequents bel	
	A	G	I	J
A		.36	.13	.57
•	.42*			4.4
G	.42	** ** **	14	.14
1	.55	.11	***	.08
J	.50 <sup>*</sup> *	23	. 40*	***
	* n < C5	,		
	* p < .65 ** p < .01	•		
	*** p < .001			
	p < 1001	Affective Meanir	ng Indices of POWER	
Z <sub>E</sub>	0.73	0.69	0.11	-0,94
E		-	• -	
77	1 01	1 67	3 04	0.00
Z p	1.87	1.67	1,24	0,69

-0.01

0.91

0.79

0.68

ZA 0.98

Ç 0.25

1.03

0.18

PROGRESS. All cultures consider this concept highly desirable, potent, and active. The only exception are the Indians who do not see it as potent.

All cultures emphasize the importance of having the proper social conditions for PROGRESS (cooperation) and the appropriate individual characteristics. However, what is an appropriate individual characteristic differs from culture to culture. Thus, the Americans emphasize ambition, drive, foresight, hard work, and initiative; the Greeks diligence, honesty, and will power; the Indians courage, enthusiasm, and hard work; the Japanese enthusiasm, will power, diligence and foresight. In addition, there are cultural differences in the emphases on the proper social conditions, with the Greeks emphasizing peace, and the Indians unity, and the Japanese research.

The Japanese consider certain qualities of the mind (thinking, interested learning, foresight and research) and will power as important factors leading to PROCRESS, in addition to cooperation, diligence and enthusiasm.

The Americans on the other hand emphasize motivational concepts, (drive, ambition, leadership) as necessary for progress. In both cultures chance factors (luck, money) are discarded as irrelevant to progress.

The consequents of PROGRESS are again either social (scientific development) or individual (satisfaction). All cultures emphasize that knowledge is a consequent. The Americans contrast with the Greeks in seeing a connection between PROGRESS and achievement and expansion, which the Greeks do not; the Greeks see civilization, good name, and well being, as consequences; the Americans do not. The Indians are characterized by emphasis on glory, power, and wealth. Thus, they see PROGRESS as leading to the achievement of high social and societal status. The Japanese

are unique in their balanced emphasis of a variety of themes and their de-emphasis of money and well being. It is interesting to see the Japanese continuously de-emphasizing the themes of tangible concepts such as happiness, glory and civilization, as consequences of progress. The Japanese resemble the Americans in their emphasis on growth (development, expansion, improvement, scientific development) and de-emphasizing of mechanical innovations (automation, inventions and social conventions (good name). Thus, while both countries are similar in their positive orients ion towards progress, the Japanese are more introspective and stoic.

Table 32
Frequencies of Antecedents and Consequents of PROGRESS

Antecedents					Consequents				
	Amer.	Greek	Ind.	Jap .ese		Amer.	Greek	Ind.	Japanese
ability	76	67	51	58	ability	29	36	48	48
ambition	174	43	65	90	achievement	250	19	68	92
cooperation	200	105	79	209,	affluence	29	24	54	55
courage	1.0	63	150,	60	automation	26	20	56	15
diligence	92	135,	16	116	civilization	44	193,	59	158,
drive	<u> 195</u> ,	42	42	26	convenience	11	<u>30</u>	67	63
education	€7	103	57	28	courage	10	69	50	23
e. deavor	54	73	63	<u>52</u>	development	279	93	69	213,
enthusiasm	89	69	<u>143</u> ,	<u>261</u> ,	expansion	114	18	70	167,
friends	2,	16	57	14	friends	17	36	67	11
foresight	114	31	70	107	glory	8	49	124	108,
good conduct	3	82	100,	22	good name	<u>3</u>	99,	63	18
hard work	116	87	103,	<u>33</u>	happiness	36	133,	66	114.
help from others	13	16	73	<u>33</u>	improvement	288	135,	48	151,
honesty	14	183	81	41	increasing	37	21	70	39
improvement	131	25	64	143	inventions	31	45	75	27
initiative	198	56	54	53	knowledge	101,	116	104	<b>65</b>
interested	35	123	17	<u>131</u> ,	money	15	46	74	<u>7</u>
learning								•	,
invention	79	36	56	49	moral decline	4	11	61	27
knowledge	85	52	62	32	power	18	79	103	
luck	<u>6</u>	63	35	21	respect	16	89	60	23
money	10	46	114,	11,	satisfaction	154/	<u>111</u> ,	64	183
peace	16	<u>122</u> ,	17	23	scientific development	<u>263</u> ;	<u>191</u> /	85	224;
research	68	34	45	<u>150</u> ,	sorrow	1	14	54	15
seriousness	22	70	45	70	speed	17	23	71	20
strength	17	17	161;	31	success	133	69	90	116
study	36	50	65	32	thrill of dee	ds 52	91	71	91
tbinking	64	60	43	216,	unfolding of intelligence	54	76	64	65
unity	47	67	200	67	wealth	33	29	98	61
will power	80	178,	19	118	well being	50	152,	72	34

Table 33

The Antecedents and Consequences of PROGRESS Presented According to the Rank Order of Their Frequencies

### The Top Antecedents

	The Top All	recedents			
American	Greek	Indian	Japanese		
cooperation honesty initiative will power drive diligence ambition interested learning improvement peace hard work cooperation foresight education		unity strength courage enthusiasm money hard work good conduct	enthusiasm thinking cooperation research improvement interested learning will power illigence foresight		
	The Top Cor	nsequents			
improvement development	civilization scientific development	glory	scientific development		
scientific development	•	knowledge	development		
achievement	well being	power	satisfaction		
satisfaction	improvement	weal th	expansion		
success	happiness		civilization		
expansion	knowledge		improvement		
knowledge	satisfaction		success		
	good name		happiness		
			glory		
(Bas	Correlation ed on Antecedents above a	ns Among Cultures and Consequents bel	ow diagonal)		
A	G	I	<b>y</b>		
A	05	-,17	.38*		
G .38 <sup>*</sup>		26	.15		
I01	.G5		05		
<b>j</b> .77	.53**	.11			
* p < .0 *r p < .0 *** p < .0	1 01				
	Affective Meaning	Indices of PROGRE	SS		
z <sub>E</sub> 0.80	0.96	0.82	1,06		
z <sub>p</sub> 1,23	1.07	-0.33	1.12		
Z <sub>A</sub> 1.27	0.43	0.94	C.09		

0.82

0.33

0.36

0.27

SUCCESS. This is a value all over the world. It is potent and relatively active.

All cultures see ability, cooperation, courage, effort, patience, planning, preparation, and will power either strongly or somewhat related to SUCCESS. The Americans contrast with the Japanese in that they mention devotion and hard work while the latter do not. In terms of the overall rankings, the Americans see hard work and ability as most important, while the Greeks see patience and will power, the Indians tact and leadership, and the Japanese effort and will power. Thus, both the Americans and the Japanese see a greater connection between individual effort, on the one hand and success on the other than do the other cultures; the Greeks see a relationship between persistence (patience, will power) and success; and the Indians between effective social relations (tact, leadership, planning) and success.

On this concept the Indians seem different from the other cultures.

They emphasize social factors that promote SUCCESS, as well as a huge army, leadership, and unity. The other three cultures see SUCCESS as dependent on appropriate individual qualities.

In all cultures the consequences of SUCCESS are happiness, increased aspiration level, joy, satisfaction, and self-confidence. The Americans are very high in their emphasis on achievement, uside and respect, on which some cultures disagree. The Greeks emphasize love. In other is in Greece SUCCESS leads to greater acceptance by the ingroup (see Triandis and Vassiliou, 1967). The Indians emphasize the achievement of status (fame, social distinction, prominence, respect). The Japanese are quite similar to the Americans (r = .79) except that they disregard status (social prominence and respect) as consequents of success. The similarities between the American and the Japanese may reflect similar achievement orientations in industrialized free-enterprise societies.

Table 34
Frequencies of Antecedents and Consequents of SUCCESS

Antecedents					Consequents				
	Amer.	Greek	Ind.	Japanese		Amer,	Greek	Ind.	Japane -
ability	104,	<u>81</u>	51	113,	achievement	161,	27	48	72,
cooperation	63	69,	62	75,	admiretion	20	59	54	34
courage	33	72	50	7/1,	courage	12	31	30	21
devotion	88	30	54	3	egotism	13	32	41	12
discipline	35	46	70	35	envy	14	19	36	24
effort	96,	81,	54	<u>191,</u>	false pride	3	22	41	18
endeavor	34	33	60	42	fame	8	59	83)	36
failure	1	12	42	51	freedom	10	51	23	8
fortune	13	18	41	7	friends	9	29	20	<u>8</u> 5
friends	12	26	16	5	gladness	29	55	ا6د	<u>88</u> ,
happiness	48	40	23	4	happinuss	<u>95</u> ,	<u>75</u> j	59	105,
hard work	108	58	61	16	increased asp				
					`.evel	<u>70</u>	74,		75,
huge army	<u>5</u> ,	12	<b>73</b> ,	8	j⊍b	10	<u>25</u>	28	1. 4.
inquiring mind	36	5.5	28	<u>108</u> ,	job success	8	63	52	4
knowledge	61	44	15	<u>23</u>	joy	94	63	56	179/
leadership	36	13	<u>77</u> ,	25	knowledge	32	31	27	15
love	28	25	16	23	love	30	76,	34	<u>8</u>
luck	10	39	43	44	peace	19	45	22	14,
mcaey	18	29	38	4	power	9	24	49	34
patience	84	103	59	126	praise	28	41	54	35
peace	19	56	33	<u>3</u> ,	pride	83	34	57	75,
planning	<u>82</u> ,	65	73,	49	progress	104	59	42	101
proparation	<u>75,</u>	49	61	53	respect	<b>65</b> <sub>1</sub>	49	<u>69</u> ;	15,
progress	55	<u>66</u> ,	31,	63	satisfaction	147,	74	55	169
research	37	32	52	67	self-confider	ce 101	67	51	124
sincerity	55	59	40	50	social distinction	20	64	<u>80</u>	<u>8</u>
tact	19	18	83;	41	social prominence	57	57	73,	16
unity	28	42	72	45	vanity	4	9	58	15
wealth	22	13	22	12	wealth	18	31	30	17
will power	61	94	40	<u>141,</u>		1			1

Table 35

### The Antecedents and Consequences of SUCCES. Presented According to the Rank Order of Their Frequencies

### The Top Antecedents

American	Gr' :k	Indian	Japanese
hard work	patience	tact	effort
ability	will power	leadership	will power
effort	ability	hugh army	patience
devotion	effort	planning	ability
patience	courage	ur.ity	inquiring mind
planning	ccoperation	discipline	cooperation
preparation	progress		courage
	The Top Con	sequer. \$8	
achievement	love	fame	joy
satisfaction	happiness	social distinction	satisfaction
progress	increased aspiration level	social prominence	self-confidence
salf-confidence		respect	happiness
happiness	satisfaction	•	progress
joy			gladness
pride			increased
increased aspiration			increased aspiration
level			level

# Correlations Among Cultures (Based on Antecedents above and Consequents below diagonal)

pride

achievement

respect

	A	<b>e</b>	I	J
A		.69 <sup>***</sup>	.19	.48**
G	.40*	••	.04	.74***
I	.25	.41*	-	.14
J	。79 <sup>***</sup>	.49	.28	
	* p < .05 ** p < .01 *** p < .001	•	ន	
		Affective Meaning	Indices of SUCCESS	
$\mathbf{z}_{\boldsymbol{E}}$	1.05	0.99	0.42	1.77
$\mathbf{z}_{\mathbf{p}}$	0.97	1,17	1.19	1.61
$\mathbf{z}_{\mathbf{A}}$	0.09	0.18	-0.27	0,61
С	0.37	0.21	0.86	0.44

WEALTH. This concept is a value in America and Japan but not in Greece and India. It is very potent, in all cultures. The two Western cultures see it as active and the two Eastern as passive.

We note that the concept is highly differentiated in America, and to some extent also in Japan. However, in India it is not very differentiated (note the small number of significant Cs).

In all cultures, <u>savings</u> and <u>success</u> are antecedents of WEALTH.

In America <u>drive</u>, <u>education</u>, <u>happiness</u>, <u>knowledge</u>, and <u>money</u> are important intecedents. It is the individual's characteristics (<u>drive</u>, <u>education</u>) that are the primary determinants of WEALTH. In Greece the emphasis in on <u>courage</u>, <u>hard work</u>, <u>intelligence</u>, and <u>patience</u>. Again individual characteristics are important, but they are a different set from those used by the Americans. On the other hand, the Indians emphasize ancestral property, the <u>capitalist system</u>, <u>earnings</u>, <u>good fortune</u>, and <u>inheritance</u>, as determinants of WEALTH. The Japanese emphasize the <u>capitalist system</u>, <u>fortune</u>, and <u>luck</u>. Health is not seen as an antecedent of WEALTH by the Indians; while it is seen as such in the two highly industrialized countries.

Generally the Americans stress the importance of both individual education (education, inquiring mind, knowledge) and the influence of chance (good fortune) and previous wealth (money, savings). The Greeks emphasize psychological conditions (courage, inquiring mind, intelligence, patience), the Indians private (earnings, savings, money) and institutional (ancestral property, capitalist system, inheritance) sources of wealth coupled with chance factors (good fortune, luck). The Japanese de-emphasize education, and hardwork and focus on the chance factors and

the money-saving effort. This reflects some unique economic conditions in Japan, where the inheritance tax rates are extremely high and both education and hard work bear little relationship to the accumulation of wealth. Education and hard work, according to the Japanese, may enrich one's spiritual wealth but certainly not one's material wealth. Thus, wealth depends on chance.

The slightly negative evaluation of WEALTH by the Greeks and the Indians is reflected in the high importance of consequents such as selfishness, fear of thieves, and arrogance, in these cultures. By contrast the Americans give only good consequents and the Japanese give mostly good (with the exception of vanity). The Americans and Greeks and also the Americans and the Japanese share many As and Cs.

Abundance, enjoyment, happiness, luxury, power, success, and well being tend to be high as consequents of WEALTH in all cultures. The Americans also emphasize affluence, but the Greeks de-emphasize it. The Americans and the Greeks emphasize comfort, while the Japanese de-emphasize it.

The Greeks emphasize both philanthropy and selfishness as consequents of WEALTH. The Indians are unique in their emphases on fear of thieves and arrogance. The Japanese are unique in their emphases on stability and gorgeousness.

Examination of the Japanese responses to WEALTH leads to the impression that this is an ambivalent concept. On the one hand it leads to abundance, enjoyment, happiness, luxury, satisfaction and stability and on the other to desire, power (both negative concepts), vanity and evil thoughts. It is also dissociated from comfort, prestige, success and well being. It is likely that WEALTH conflicts with the Japanese traditional positive evaluation of stoicism.

Table 36
Frequencies of Antecedents and Consequents of WEALTH

Antecedents					Consequents				
	Amer.	Greek	Ind.	Japanese		Amer.	Greek	Ind.	Japanese
ancestral property	10	21	<u>67</u>	19	abundance	100	50	51	<u>135</u> ,
business profit	31	41	53	66	affluence	<u>79,</u>	12	37	61
capitalist system	41	14	84	<u>94</u> .	arrogance	14	32	<u>73</u> 1	18,
courage	47	82,	36	68	benevolence	31	63	32	10
crime	4	14	49	<u>10</u> ,	comfort	101,	<u>89</u>	38	19
deceit	4	21	42	<u>7</u> ,	decadence	9	17	54	19
drive	<u>90</u>	17	32	9,	desire	33	30	46	112,
earnings	63	18	88	65	destruction	<u>6</u>	<u>19</u>	36	18
education	80	62	33	17	enjoyment	84	81	42	86,
endeavor	24	51	30	42	evil thoughts	4	17	66	50
fortune	58	25	47	107,	fear of thieve	es <u>20</u>	38	80,	22
good fortune	72,	65	74	62	friends	20	<u>25</u>	32	10
happiness	85,	30	29	67	gorgeousness	<u>6</u> ,	27	35	<u>78</u>
hard work	52	<u>87</u> ;	32	12	happiness	<u>75</u>	63	44	72
health	66,	60	25	94,	health	<u>15</u>	60	<u>30</u>	20
high interest charges	4	15	60	12	knowledge	27	37	34	<u>8</u>
inheritance	24	51	<u>86</u> ,	30	love	15	29	24	18
inquiring mind	65	84	26	33	luxury	<u>93</u> ,	100	39	<u>138</u> ,
intelligence	42	107,	31	33	misery	11	22	50	29
knowledge	82	47	28	50	philanthropy	30	<u>68</u> ,	46	24
love	58	28	24	54	power	71	63	<u>78</u>	<u>79</u>
luck	31	60 ·	59	<u>90</u>	prestige	<u>65</u> .	<b>37</b>	<u>72</u> ,	32
marriage	13	27	43	5	respect	29	28	47	4
money	<u>65</u> ,	37	<u>80</u> .	62	satisfaction	119	82	37	<u>99</u> ,
patience	46	104,	39	66	selfishness	22	67,	56	38
power	42	28	29	57	stability	49	39	41	106
savings	<u>68,</u>	<u>85</u> ,	<u>70,</u>	104,	success	112i	83,	50	49
stinginess	2	21	59	12	unhappiness	<u>9</u> ,	25	62	23
success	<u>93</u> ,	<u>75</u> ,	45	<u>131</u>	vanity	19	34	66	81
theft	<u>5</u> ,	17	40	9,	well being	<u>97,</u>	85,	45	35

Table 37

# The Antecedents and Consequences of WEALTH Presented According to the Rank Order of Their Frequencies

### The Top Antecedents

American	Greek	Indian	Japanese
success drive happiness knowledge education good fortune savings inquiring mind health money	intelligence patience hard work savings inquiring mind courage success	earnings inheritance capitalist system money good fortune savings ancestral property	success fortune savings capitalist system health luck

### The Top Consequents

satisfaction	luxury	fear of thisves	luxury
success	comfort	power	abundance
comfort	well being	arrogance	desire
abundance	success	prestige	stability
well being	philanthropy		satisfaction
luxury	selfishness		vanity
enjoyment			enjoyment
affluence			power
happiness			gorgeousness
power			happiness
prestige			

# Correlations Among Cultures (Based on Antecedents above and Consequents below diagonal)

	A	G	I	J
A		.37*	20	.52**
G	.69***		25	.28
I	11	13		.17
J	.51**	.27	.01	
	* p < .05 ** p < .01 *** p < .001		Meaning Indices of WEALTH	
z <sub>e</sub>	0.81	-0.30	-0.27	0.80
z <sub>p</sub>	1.11	0.82	0.60	1.28
$\mathbf{z}_{\mathbf{A}}$	-0.13	-0.91	0.66	1.05
C	0.41	0.41	0.92	0.51

#### Non-Achievement

DEATH. All cultures see this concept as "bad" and passive. The two Western cultures also see it as weak; while the two Eastern cultures see it as potent.

The antecedents of DEATH show much similarity across cultures, except that the Indians agree very little with the other cultures. All cultures see a substantial connection between accident, illness, murder, old age, suicide and war on the one hand and DEATH on the other. However, there are also some cultural differences. Thus, the affluent Americans emphasize life but de-emphasize hunger, dispair, and decrepitude, as an antecedent of death, while the Greeks emphasize carelessness and decrepitude and the Indians old age, hardship, disgust with life, and gun. The Japanese stress length of life, bad luck and decrepitude.

Again, the Japanese display their neglect of religion-related antecedents (no religion, sin) and they emphasize not only the common antecedents of death (murder, accident, war), but also self-produced causes (despair, suicide) and causes beyond one's control (bad luck, length of life). The latter antecedent is clearly Japanese, and equivalent to "living out the whole of one's alloted span of life under the Heaven's will," which is traceable to the ancient Chinese concept of the "lifespan."

The consequents of DEATH also show some cross-cultural similarities.

Burial, funeral, loss of loved ones, oblivion, sorrow, and suffering are given by the samples of all the cultures in substantial frequencies, though the required significance levels are not always reached in all cultures.

On the other hand, loneliness and extinction are particularly high in the

two industrialized societies, family breakdown and joy of enemies are emphasized by the Greeks, and dejection by the Indians.

The Americans are unique in their emphasis on decrease in population.

The Greeks are unique in their emphases on family breakdown and joy of enemies. In order to understand the Greek responses it is necessary to know about the importance of the struggle between ingroups and outgroups in Greece (see Triandis and Vassiliou, 1967) which suggests that outgroup members may be pleased with the death of a member of the ingroup.

Although the Japanese are non-religious, the pattern of their responses seems to conform to their version of Buddhist tradition which emphasizes the shift from "existance" to "nothingness" (separation of body and soul, extinction, oblivion). Consequently, various psychological states (fear, loneliness, vacant mood, sorrow) become important and indicate an unretrievable loss of those who stay behind.

Death is a universal phenomenon, but even such a fundamental concept reflects the unique social, economic, and religious conditions prevailing in the four societies under study.

Table 38
Frequencies of Antecedents and Consequents of DEATH

Antecedents					Consequents				
	Amer.	Greek	Ind.	Japanese	<u> </u>	mer.	Greek	Ind.	Japanese
accident	79,	<u>85</u> ,	64	<u>71</u>	burial	<u>64,</u>	51	81,	63
bad luck	19	59	53	<u>78,</u>	crying	50	61	42	<u>8</u>
carelessness	17	<u>69</u> .	26	48	decrease in opoulation	<u>61</u>	53	47	37
crime	50	61	22	<b>57</b>	dejection	9	18	<u>69</u> ,	49
decrepitude	12	68;	32	781	deliverance	40	49	42	9
despair	16	54	28	$81_i$	disgust	8	18	39	21
disgust with life	38	46	<u>73</u>	47	eternal life	38	56	34	66
drunkenness	3	20	30	<u>5</u>	extinction	62,	30	40	68
exhaustion	17	60	32	56	family break- down	13	72,	44	16
external wound	<u>8</u>	32	20	3	fear	24	20	<u>50</u>	<u>100</u> ,
failure	31	24	<u>78</u>	<u>30</u>	funeral	68	<b>76</b> j	<u>67</u> ,	58
fear	17	31	34	17	going to heaven	22	25	<b>4</b> 0	<del>29</del>
gun	9	28	73	<u>6</u>	going to hell	<u>10</u>	<u>15</u>	34	4
hardship	14	51	89		grave	54	46	42	52
ha te	33	<u>29</u>	<u>26</u>	28	hardship	16	28	64	<u>25</u>
hunger	10	30	55	51	joy of enemies	12	72	42	<u>3</u>
illness	34	<u>73.</u>	86	54	loneliness	<u>69</u> ,	54	38	101,
incident	26	71.	29	21	loss of loved ones	<u>67,</u>	60	59	47
length of life	51	30	36	<u>136</u> ;	new birth	27	29	39	64
life	<u>67</u> .	35	31	52	nothingness	54	42	32	49
murder	135,	<u>66</u> ,	<u>86</u> .	100	oblivioa	83	59	60	127,
no religion	47	34	38	11,	pain	18	39	44	17,
no will	43	28	19	36	peace	31	31	15	15
old age	54	<u>79</u>		57	rebirth	29	25	57	43
quarrel	<u>1</u> ,	22	54	<u>I</u>	ruin	7,	65	49	48
sin	38	24	44	25	separation of hody and soul	50	€2	<u>82</u> ,	721
sorrow	11	29	25	32	sorrow	55	57	51	132
suicide	<u>115</u>	47	88	100,	suffering	52	81	901	55
thirst	2	12	42	9,	sympathy	32	50	21	19
M&I.	146,	<u>99</u> ,	59	162	vacant mood	25	50	41	84

Table 39

# The Antecedents and Consequences of DEATH Presented According to the Rank Order of Their Frequencies

### The Top Antecedents

American	Greek	Indian	Japanese
war	war	hardship	war
murder	accident	suicidė	length of life
<b>suicide</b>	old age	illness	murder
accident	illness	murder	suicide
life	incident	failure	despair
	carelessness	disgust with life	bad luck
	decrepitude	gun	decrepitude
	murder	old age	accident
	The	Top Consequents	
oblivion	suffering	suffering	sorrow
loneliness	funeral	separation of	oblivion
%uneral	family break- down	body and soul	loneliness
loss of loved ones	joy of enemies	burial	fear
bi tial		dejection	vacan, mood
extinction		funeral	separation of body and soul
decrease in population			extinction

# Correlations Among Cultures (Based on Antecedents above and Consequents below diagonal)

	A	G	I	J
A	₩.	.52**	.39*	.71***
G	. 43		.24	.60 <sup>***</sup>
I	.27	.32		.23
J	, 53 <sup>***</sup>	. 13	.30	***
	* p < .0 ** p < .0 *** p < .0	1 01	ive Meaning Indices o	f DEATH
z <sub>E</sub>	-1.93	-2.25	-1.65	-1.64
z <sub>p</sub>	-0.47	-0,59	0.74	0.37
z <sub>A</sub>	-2.87	-1.66	-1.19	-1,89
С	0.67	0.48	1.05	0.79

DEFEAT. This concept is negatively evaluated in all cultures. It is seen as impotent and passive in the two Western cultures as well as in Japan, and potent and passive in India.

Lack of confidence and motivation (no desire, giving up, apathy)
as well as weaknesses and mismanagement are important antecedents in
America. All cultures agree that either no preparation or no planning
may lead to DEFEAT. Treason is not an antecedent in America, while it
is in the other three cultures. The Greeks emphasize superficiality
and ineptitude as well as illness. These are flaws of the individual, but
not of individual motivation. The Indians see DEFEAT in its politicasocietal context--small army, lack of arms, etc.

The Japanese emphasize both physiological and psychological causes of defeat (illness; giving up, lack of confidence, no enthusiasm, and no perseverance), while they under-emphasize indications of insufficient ability (lack of power, inferiority). The Americans contrast with the Japanese in their emphasis on inferiority. The Japanese educational system is highly competitive and gives young people much opportunity to experience defeat. It is in this context that the meaning of this word can best be seen, and this explains the reason why illness is such an important antecedent.

The consequents are everywhere <u>disappointment</u> and <u>discouragement</u>.

The Americans also emphasize <u>failure</u>, <u>sorrow</u>, and <u>trying again</u>. The

Greeks emphasize <u>destruction</u> (as has so often occurred in their turbulent history as a consequence of defeat. The Indians emphasize <u>defamation</u> and <u>ridicule</u>.

The American view of DEFEAT may refelct the fact that America was not defeated in war. The view is different from that of the other three cultures, in that treason is under-emphasized. It is known that after a defeat the most "popular" explanation which reduces cognitive dissonance is treason. It might be that when a country has not gone through such an experience it does not develop the cognitive norms that are typical of other countries. The consequents of DEFEAT in America seem to be characterized by the fact that they are not devastating. There is a note of optimism. The Greeks see destruction -- a more devastating consequent; the Indians, loss of status. The Japanese emphasize not only the consequents of defeat (disappointment, sadness, sorrow) but also introspection, trying again and driving force for progress. It is clear that the Japanese see defeat as a temporary state of affairs, and a natural event in the ever-present process of trial and error, as well as an important basis for future progress. Quick recovery after the second World War and the "great leap forward" in economic activity, may ..ave conditioned this meaning of DEFEAT.

Table 40
Frequencies of Antecedents and Consequents of DEFEAT

Antecedents					Consequents				
	Amer.	Greek	Ind.	Japanese		Amer.	Greek	Ind.	Jepanese
accident	<u>5</u>	19	<u> 26</u>	31	arger	36	24	38	30
apathy	110	14	25	15		20	41	28	30
bad luck	21	36	55	36	death	10	23	23	18
cowardice	22	63	58	45	deformation	17	29	104	<u>7</u> ,
failure	73	38	48	40	degradation	71	51	<u>77,</u>	<b>33</b>
faithfulness	4	<u>75</u> ,	18	<u>7</u>	depression	<u>78</u> ,	28	97,	35
fear	17	38	61	49	despair	<u>99</u> ,	57	42	54
giving up	121,	25	29	121	destruction	43	86,	48	27
guilt	7	16	22	19	difficulty	44	56	65	39
hate	9	20	31	17	disappoint- men.	130,	83,	43	1001
illness	38	<u>80</u>	38	126	discourage- ment	108,	73	61	64
ineptitude	53	74	25	55	dishonor	66	53	103,	34
inferiority	<u>86</u> ,	58	36	<u>26</u>	driving force for progress	42	46	<u>36</u>	<u>91</u> ;
lack of arms	10	27	<u>68</u>	18	failure	111,	<u>70</u> ,	45	15
lack of confidence	103,	44	58	92	fear	15	25	22,	18
lack of endeavo	or 41	52	53	63	fight	13	62	54	11
lack of power	35	48	45	17	hate	12	32	27	29
lack of unity	57	<u>69</u> ,	<b>5</b> 3	44	inferiority complex	17	56	62	<u>69</u>
mismanagement	84,	41	<u>84</u> ,	38	introspection	45	18	19	160,
no desire	127,	35	29	52	misery	51	48	58	108,
no enthusiasm	56	63	51	<u>89,</u>	nothing	34	15	16	30
no perseverance	79	80	53	<u>73,</u>	remorse.	35	48	54	96,
no plan	57	74,	85	<u>96,</u>	revenge	32	57	30	49
no preparation	39	35	73	61	ridicule	31	45	93,	15
powerlessness	55	52	43	60	sadness	76,	40	<b>68</b> <sub>j</sub>	79
small army	3	23	93,	1	servitude	10	54	23	
stoppi:	24	<u>8</u>		$\frac{1}{e}$	shock	<u>z</u>	54	21	21 23
superficiality	28	<u>85</u>	26	79,	30rrow	89,	42	50	120
treason	14	<u>70,</u>			stagnation	12	45	26	13
weakness	<u>76</u> ,	37	60	41	trying again	99,	55	33	941

Table 41

The Antecedents and Consequences of DEFEAT Presented According to the Rank Order of Their Frequencies

#### The Top Antecedents

	The top A	ntecedents	
American	Greek	Indian	Japanese
no desire	superficiality	small army	illness
giving up	illness	treason	giving up
apathy	no perservance	no plan	no plan
lack of confidence	faithfulness	mismanagement	lack of confidence
inferiority	ineptit⊿de	no preparation	10 enthusiasm
m.t.smanagement	no plan	lack of arms	treason
no perseverance	treason		superficiality
weakness	lack of unity		no perserverance
failure	·		•
	The Top C	onsequents	
disappointment	destruction	deformation	introspection
failure	disappointment	dishonor	sorrow
discouragement	discouragement	depression	misery
despair	failure	ridicule	disappointment
trying again		degradation	remorse
sorrow		sadness	trying again
depression			driving force
			for progress
<b>v</b> adness			sadness
degradation			inferiority
			complex
	Correlati	ons Among Cultures	
(Base	ed on Antecedents abo	ve and Consequents bel	low diagonal)
A	G	I	J
			*

	A	G	I	J
A		.00	09	,37*
G	.44*	Ger qua	.13	.51**
I	.23	.12	•••	.15
J	.43*	.02	14	
	* p < .05 ** p < .01 *** p < .001	Affective Mean	ing Indices of DEFEAT	
z <sub>E</sub>	-1.62	-2.24	-1.78	-1.95
$\mathbf{z}_{\mathbf{p}}$	-0.30	-0.71	0.35	-0.56
$\mathbf{z}_{\mathbf{A}}$	-0.39	-1.51	-1.17	-1.21
C	1.01	0.74	0.87	0.67

#### Social Relations

LOVE. This is positively evaluated, potent, and active in all cultures. The only exception is a low value on potency in India.

In all cultures, affection and trust are antecedents of LOVE. America and Japan have a number of common antecedents: beauty, happiness, joy, and kindness, are emphasized by both cultures. The Greeks are unique in emphasizing devotion to God, good conduct, morality, niceness, and sex-love. The Indians are unique in emphasizing the connection between girl and LOVE. Devotion to God has nothing to do with love, in Japan, where love is associated with positive interpersonal emotions (affection, goodwill, kindness, joy, happiness, trust,) and is rather non-sexual, with an emphasis on family, and a de-emphasis on sexual drive, sex love and girl.

The consequents of LOVE include friends, happiness, and jor in most cultures. For the Americans and the Japanese they are highly intercorrelated (r = .78) and include an emphasis on companionship and trust. Concern for others, sacrifice, and goodness are mentioned by the Americans; marriage by the Greeks and Indians; children by the Greeks. The Indians are unique in emphasizing that sorrow is a consequent of LOVE. The Japanese emphasize the connection between LOVE and desirable states (happiness, joy, trust, companionship, friends), but see it as a state that is short-lived and frail, as is suggested from the emphasis on disappointment and emptiness and the deemphasis on eternity.

60

71,

68/

56

truth

Table 42
Frequencies of Antecedents and Consequents of LOVE

Antecedents	•				Consequents				
	Amer.	Greek	Ind.	Japanese		Amer.	Greek	Ind.	Japanese
admiration	62	54	64	13	bad workmanshi	p 0	39	23	1,
affection	161;	70,	93	119,	calamity	2	11	53	<u>6</u>
beauty	67,	37	78,	98,	c'ildren	21	<u>68</u>	56	<u>6,</u>
cooperation	28	24	46	23	companionship	221,	<b>65</b>	62	<u>72</u> ,
devotion to Goo	•	74	24	27	concern for others	102,	22	33	<del>27</del> ,
education	<u>o</u> ,	28	37	7	concordance	40	87	33	56
emotions	<b>57</b>	ยา	33	111	crime	0	17	30	7
faith	86,	<u>69</u> ,	44	8	disappointment	52	43	59	71,
family	50	56	34	<u>79</u> ,	emptiness	1	<u>15</u> ,	18	34
friends	27	25	55	49	eternity	18	18	46	23
girl	40	49	92,	24	friends	186	135	<u>76</u> ,	1451
good conduct	6	82,	65	29	fein	19	27	22	<u>4</u>
goodness	54	65	37	22	goodness	<u>69</u> ,	51	43	31
good will	27	24	38	110	happiness	183	121	58	168
happiness	104,	53	48	<u>97</u> 1	hatred	2	<u>15</u>	46	16
instinct	15	15	21	51	joy	105	<u>79,</u>	61	<u>170</u> ,
joy	91	30	40	<u>77</u> ,	lust	<u>6</u>	24	59	39
kindness	126	32	46	77,	madness	1	16	51	14
leniency	<u>6</u>	17	23	61	marriage	43	<u>79</u> ;	<u>76</u> ,	53
loveliness	14	14	57	30	painfulness	4	15	55	42
morality	24	<u>68</u> ,	49	16	peace	44	70	62	104,
niceness	27	77,	28	18	progress	23	71,	50	51
obedience	<u>6</u> ,	39	54	5	prostitution	1,	19	53	<u>3</u>
presence of mat		<u>6</u>	49	51	respect	111	47	30	41
politeness	2	<b>73</b> ,	30	14	sacrifice	81,	47	54	27
respect	101,	51	43	65	sex	32	44	94	39
sex love	30	84	49	30	sorrow	4,	9	68,	21
sexual drive	18	23	46	12	suicide	ī	18	24	<u>6</u>
trust	138	76	63	<u>170</u> ,	trust	106	57	29	127,

wealth

Japanese

Table 43

The Antecedents and Consequences of LOVE Presented According to the Rank Order of Their Frequencies

Greek

American

### The Top Antecedents

Indian

	<del></del>		
affection	sex love	affection	trust
trust	good conduct	firl	affection
kindness	niceness	beauty	emotions
happiness	trust	•	good will
respect	devotion to God		beauty
Joy	politeness		happiness
faith	affection		family
beauty	faith		yot
	morality		kindness
	The Top	Consequents	
friends	friends	86%	joy
happiness	happiness	friends	happiness
companionship	joy	marriage	friends
respect	marriage	sorrow	trust
trust	progress		peace
joy	children		companship
concern for others	truth		disappointment
sacrifice goodness			truth

# Correlations Among Cultures (Based on Antecedents above and Consequents below diagonal)

	Α	G	I	J
A		.33	.34	.67 <sup>***</sup>
G	.76***		.09	.06
I	.22	.37		.17
J	.78***	.79***	.35	
	'*** p < .001			
		Affective Mean	ing of Indices of LOVE	
$\mathbf{z}_{\mathbf{E}}$	1.38	1.13	0.37	1.32
$\mathbf{z}_{\mathbf{p}}$	1.93	2.02	-0.31	0.72
$\mathbf{z}_{\mathbf{A}}$	0.89	1,64	0.14	0.84
C	0.34	0.39	0.94	0.35

RESPECT. This concept is good, strong, and passive in all culture, with the exception of the Greeks who see it as active.

All cultures see morality as an antecedent of PESPECT. The Creeks, Indians, and Japanese differ from the Americans in that they imphasize rather ordinary behaviors or characteristics as leading to RESPECT. Thus, behavior with decorum, and sincerity lead to RESPECT in those three cultures. The Americans are unique in their over-emphasis of extraordinary behaviors or characteristics as antecedents of RESPECT. Thus, loyalty, admiration, courage, and honor, are important. The Greeks are unique in their over-emphasis on behavior with decorum, good breading, and good conduct. They emphasize that if one behaves properly he is respected by his ingroup.

The Indians are unique in emphasizing that respect for leaders is an antecedent of RESPECT. The Japanese are unique in emphasizing the importance of good deeds and personality in getting RESPECT. Old age is an antecedent of RESPECT only in the less industrialized societies (Greece and India).

All cultures have very sim' ar consequents of RESPECT.

Honor is a universal consequent of respect. Status and trust are also generally given as consequents of RESPECT. The Americans and Japanese also emphasize <u>friendship</u>; the Americans and the Greeks emphasize the return of respect. RESPECT leads to success and trust in Greece, to fame and power in India, and to worship and love in Japan.

The major cultural difference appears to be the rather exalted view of RESPEC. in America, which is not shared by the other three cultures Americans treat other people <u>fairly</u>, but RESPECT requires some extraordinary achievement, unusual courage, or the presence of some other basis of honor. The three cultures see RESPECT as an ordinary consequence of normal living. As long as a person does what he is expected to do he receives respect and then he is treated fairly. The consequents of RESPECT are rather similar across the four cultures.

Table 44
Frequencies of Antecedents and Consequents of RESPECT

Antecedents					Consequents				
	Amer.	Greek	Ind.	Japanese		Amer.	Greek	Ind.	Japanese
adzivation	94	27	56	28	admiration	<u>110</u> ,	34	67	67
behavior with decorum	33	147	<u>70</u> :	81,	a pupil	<u>5</u>	25	10	20
brains	16	32	38	38	disappointment	9	12	19	30
courage	126	22	<u>76,</u>	<u>71</u> ,	endeavor	13	19	51 <sup>°</sup>	25
endeavor	<u>7</u>	18	36	25	envy	19	16	45	69
excellence	53	<u>1.8</u>	41	<b>56</b> ′	fame	12	31	79	49
fear	21	11	13	8	friendship	93,	62	40	81,
friendshir	93	31	37	38	good character	48	68,	49	29
good breading	Û	105	22	5	good name	42	80	61	53
good character	<u>93</u> ,	83	72	33	help	26	37	23	43
good conduct	<u>14</u>	82	53	48	honor	255	110	123,	<u>129</u>
good deed	7	49	57	98 :	knowledge	31	17	53	20
greatness	<u>71</u> .	20	<u>73,</u>	98	liking	62	56	48	59
honor	92,	44	51	27	love	60	63	54	84,
knowledge	47	24	32	50	money	3	20	26	2
love	95,	68,	52	<b>81</b> )	obedience	37	59	54	<b>62</b>
loyalty	121,	34	45	57	реясе	33	51	22	53
money	4	10	25	4	politeness	27	63	53	44
morality	<u>98</u> ,	114.	144,	132,	position	23	55	66	22
old age	14	74	97	25	power	17	14	<u>72,</u>	35
personality	19	38	35	114	progress	61	65	53	48
power	46	38	39	61	recognition of superiority	65	55	52	63
respect for leaders	<u>30</u>	49	<u>82</u> ;	24	return of respect	<u>74</u> ,	92	51	27
self-respect	121,	<u>97</u> .	58	41	self-satis- faction	33	48	17	<u>31</u>
sincerity	56	<u>73</u> ,	74/	104,	status	75,	<u>73</u> ,	91,	47
superiority	16	50	22	20	success	49	66,	46	<u>26</u>
trust	110	40	45	122	trust	<u>130,</u>	66	54	152 <sub>1</sub>
					vanity	12	13	21	16
					worship	11	21	40	113,
						•	,		

Table 45

The Antecedents and Consequences of RESPECT Presented According to the Rank Order of Their Frequencies

### The Top Antecedents

American	Greek	Indian	Japanese			
loyalty	behavior with	morality morali				
	decorum					
self-respect		old age	trust			
trust	morality	respect for leaders	personality			
morality	good breathing	courage	sincerity			
love	self-respect	sincerity	good deed			
admiration		greatness	greatness			
friendship	old age	good character	behavior with decorum			
good character	sincerity	behavior with				
		decorum				
honor	love		love			
greatness			ccurage			
	The Top Co	onsequents				
honor	honor	honor	trust			
trust	return of respect	status	honor			
admiration	good name	fame	worship			
frie dship	status	power	love			
status	good character		friendship			
return c espect	success					

trust

### Correlations Among Cultures (Based on Antecedents above and Consequents below diagonal)

	A	G	I	J
A	to to	.04	.34	.32
G	.70***	~	.49*	.21
I	*** .65	.51**		.47*
J	.67***	.39*	.42*	
	* p < .05 ** p < .01 *** p < .001	Affective Meaning	Indices of RESPECT	
z <sub>E</sub>	1.00	0.81	C.98	0.97
z <sub>p</sub>	1.36	1.14	0.32	<b>0.98</b>
z <sub>A</sub>	-0.49	0.66	-0.27	-0.82
C	0.21	0.37	0.85	0,59

SYMPATHY. This concept is a universal value, particularly in the East. It is seen as potent and active in all cultures except America where it is seen as weak and passive.

There is a distinction between the common American meaning of sympathy, which connotes pity, and the primary meaning of this concept which is defined as the "quality of being affected by the state of the other with feelings correspondent in kind" (Britannica Dictionary). In spite of the fact that the Britannica Dictionary gives pity as a third choice and the above definition as the first choice, it appears that Americans think of pity and compassion rather than similarity of affect, when they think of SYMPATHY. Care, compassion, pity, concern, love, and emotion are the important American antecedents of SYMPATHY. The Greeks, on the other hand, clearly think of the primary definition, since goodness, good character, trust, good behavior, and admiration are their preferred antecedents. The Indians think of tangible objects of pity (beggars, poverty, hardship, deplorable conditions, illness) but they also feel that it is particularly appropriate to show sympathy toward those who follow the principles of non-violence. For the Japanese, compassion and pity are indicated by the same word. However, both definitions of the concept are present, as can be seen from the presence of pity, deplorable conditions, and care on the one hand and same experience on the other.

The consequents of SYMPATHY universally include bonds, help, and offer of help. As expected from the analysis of the antecedents, in which the Greeks are different from the other three cultures, we see a more reciprocal set of consequents in the case of the Greeks (friendship, trust, love, respect, and admiration) and more unilateral consequents in the case of the other cultures. (compassion, care, sorrow, pity, and charity).

Table 46
Frequencies of Antecedents and Consequents of SYMPATHY

Antecedents					Consequents				
	Amer.	Greek	Ind.	Japanese		Amer.	Greek	Ind.	Japanese
admiration	<u>13</u>	92	20	7	admiration	22	<u>66,</u>	53	39
agreement	<u>15</u>	35	17	19	bonds	81,	<u>92,</u>	<u>91</u> 0	146
beauty	2	50	11	9	care	119	38	45	721
beggary	38	7	142	62	charity	41	28	137,	53
care	136,	30	41	91	compassion	137	55	28	64
compassion	131	54	39	<u>147</u> ,	conduct according to	12 expec	61 tations	53 3	7.
concern	91	66	<b>70</b> ;	39	cooperation	26	44	33	<b>96</b> ;
death	51	14	79.	30	coquetry	5	17	23	13
defeat	20	<u>6</u>	25	64	crying	35	16	30	13
deplorable conditions	24	19	113	<u>101</u> ,	feeling	184	43	59	65
emotion	<b>69</b> .	44	17	54	friendship	24	104	27	89,
feeling	129,	57	27	63	help	70.	46	94	<b>9</b> 9,
good behavior	4	111.	32	18	joy	2	43	37	20
good character	48	124	27	63	kindness	158	20	82,	112,
good looks	1	35	13	<u>6</u>	love	29	<u>76</u> ,	41	53
goodness	46	164	67	36	lover's suic	ide 4	39	18	<u>5</u> ,
hardship	52	18	<u>91</u> ,	66	marriage	1	52	14	<u>1</u> ,
illness	42	<u>9</u> ,	<u>78</u>	<u>16</u>	offer of help	p <u>95</u>	<u>79,</u>	112	74,
inferior others	<u>8</u>	7	<u>15</u>	44	peace	14	44	<b>75</b> :	36
kindness	50	<u>68</u> ,	71	43	pity	112,	10	58	112;
love	71	103 <sub>f</sub>	20	<u>72,</u>	proise	8	33	55	14
nonviolence	<u>1</u>	23	79	7	respect	93	<u>68</u> ,	26	32
pity	104	22	31	93,	satisfaction	10	41	21	22
poverty	14	23	110,	18	saved life	<u>5</u>	44	79.	22 18 23
sadness	61	10	<u>75,</u>	<u>77.</u>	self respect	<u>4</u> 6	40	34	<u>23</u>
same experience	44	13	53	94	sense of superiority	<u>6</u>	39	26	55
sense of superiority	<u>5</u>	17	<u>6</u>	35	sex love	1	54	9,	5.
trust	13	112	16	22	sorrow	118	26	39	79
understanding	129	58	<b>5</b> 5	90,	trust	23	<b>82</b> ;	32	60

Table 47

The Antecedents and Consequences of SYMPAThY Presented According to the Rank Order of Their Frequencies

The Top Antecedents						
American	Greek	Indian	Japanese			
care	goodness	beggary	compassion			
compassion	good character	deplorable	deplorable			
		conditions	conditions			
feeling	trust	poverty	same experience			
understanding	good behavior					
pity	love	hardship	pity			
concern	admiration	nonviolence	care			
love	kindness	death	understanding			
emotion	concern	illness	sadness			
		sadness	love			
		concern				
	The Top Co	nsequents				
feeling	friendship	charity	bonds			
kindess	bonds	offer of help	kindness			
compassion	trust	help	pity			
care	offer of help	bonds	help			
sorrow	love	kindness	cooperation			
pity	respect	saved life	friendship			
offer of help	admiration	peace	sorrow			
respect			offer of help			
bonds			care			
help						
Comp. Noted to a Amount Co. No. man						
Correlations Among Cultures (Based on Antecedents above and Consequents below diagonal)						
A	G	1	J			
A	.04	.03	.71***			
G11		29	16			

	A		G	1	J
A			.04	.03	.71***
G	7.11			29	16
I	.31		.00		.13
J	.63 <sup>***</sup>		.19	.45*	•= 15
	***	p < .05 p < .001			
		•	Affective Mea	ning Indices of SYMPATHY	
$\mathbf{z}_{\mathbf{E}}$	0.12		0.90	1,35	1.25
$\mathbf{z}_{\mathbf{p}}$	-0.29		0.78	0.06	0.86
z <sub>A</sub>	-0.75		0.48	0.72	-0.01
С	0.65		0.24	0.78	0,52

TRUST. This concept is good, strong and passive in America and Japan; bad, weak and active in India; and good, strong, and active in Greece. Thus, the semantic differential profiles of this concept in the four cultures tend to differ.

The entecedents of this concept that have considerable cross-cultural generality include honesty, sincerity, truth, truthfulness, and understanding. In addition, "good character" and fairness seems to be an important theme in Alerica (fuith, loyalty), in Greece (fair dealing), and in India (morality, ability to keep secrets, reliance, fair dealings, and loyalty). Friendship is important in the two industrialized societies in Japan (friendship, love, respect) and America (respect, love). In status-oriented India, a unique theme appears which is concerned with high social position.

The consequents of TRUST include friendship, cooperation, reciprocal trust, and respect, in all cultures. In addition, in America there is strong emphasis on confidence and loyalty, honesty, honor, and love; in India, admiration, honor, treachery, honesty, loyalt, and status; in Japan, love, happiness, confidence, satisfaction, and loyalty

It is also noted that TRUST is associated with the same antecedents and consequents, thus forming a "causation loop." For example, <u>friendship</u>, love, loyalty, and respect are involved in such a loop for both the Americans and the Japanese. It is quite possible that certain phenomena are consected with each other in reciprocal ways, so that A causes B which in turn causes A. This may or may not be true, but at least it appears to be so in the subjective reasoning of our subjects.

We conclude that the meaning of this concept is rather similar across cultures; though India is somewhat unusual in that apparently high social position leads to TRUST, which in turn leads to honor, respect and status, symbolic of high social position. This reciprocal relationship between social status and TRUST is not found in the other three cultures.

Antecedents					Consequents				
	Amer.	Greek	Ind.	<b>Japanese</b>		Amer.	Greek	Ind.	Japanese
ability to keep secrets	7,	40	<u>87</u> ,	13,	admiration	46	107,	76	17
admiration	43	22	38	3	confidence	130	52	64	83
companionship	24	22	34	39	confiding	111/	32	61	<b>5</b> 8
confidence	<u>88</u> ,	58	52	28	cooperation	78	88,	52	95
cooperation	50	37	25	<b>5</b> 3	courage	25	32	57	59
diligence	11	27	57	16	deceit	1	17	61	<u>6</u>
fair dealing	35	68,	<u>70,</u>	10	delegation or responsibili		<b>5</b> 5	50	49
faith	102	40	29	43	devotion	45	52	24	66
friendship	58	48	45	111,	faith	109,	43	53	36
high social position	<u>1</u> ,	54	72,	14	friendship	<u>76,</u>	<u>84</u> ,	<u>66,</u>	145,
honesty	117,	98,	56	8.3	good conduct	8	31	58	14
humbleness	6	26	67	5	happiness	46	50	27	106,
joy	4	13	34	17	hardship	<u>2</u>	11	35	11
justice	52	65	43	55	honesty	78,	55	58,	45
keeping of promises	34	61	67	57	honor	<u>76,</u>	29	<u>76,</u>	10
knowledge	22	18	14	16	knowledge	18	16	31	8
love	76	61	16	141,	love	<u>67</u> ,	<u>85</u> ,	29	135
loyalty	97	51	<u>69</u> ,	65	loyalty	167	64	<u>68</u> ,	75,
money	2	4	19	7	mar~ .age	<u>6</u>	22	19	30
morality	26	63	82	37	peac <b>e</b>	28	39	23	59
peace	<u>5</u>	28	16	24	progress	36	<b>79</b> ,	40	36
reliance	67	48	71,	30	reciprocal trust	<u>80</u> ,	<u>89</u> ,	57	921
respect	<u>92</u> ,	41	51	89,	relief	/ <b>-1</b>	26	16	15
sincerity	<u>77</u> ,	82,	78:	132,	respect	119	59	<b>68</b> !	95
sympathy	_5	34	24	8	satisfaction	40	22	24	771
tolerance	7	10	13	23	sex love	10	38	20	15
truth	117,	96,	65	113,	status	2	53	68	14
truthfulness	70	<u>95</u>	63	23	success	24	53	32	43
understanding	158	111,	84	233	sympathy	3	32	33	<u>6</u>
					treachery	1,	8,	74	<u>6</u> 9

Table 49

The Antecedents and Consequences of TRUST Presented According to the Rank Order of Their Frequencies

### The Top Antecedents

American	Greek	Indian	Japanese
understanding	understanding	ability to keep secrets	understanding
honesty	honesty		love
truth	truth	morality	sincerity
faith	truthfulness	sincerity	truth
loyalty	sincerity	high social position	friendship
respect	fair dealing	reliance	respect
confidence		fair dealing	honesty
sincerity		loyalty	•
love			
truthfulness			

### The Top Consequents

loyalty	admiration	admiration	friendship
confidence	reciprocal trust	honor	ove
respect	cooperation	treachery	happiness
confiding	love	honesty	cooperation
faith	friendship	loyalty	respect
reciprocal trust	progreas	respect	reciprocal trust
cooperation		status	confidence
honesty		friendship	satisfaction
friendship			loyalty
honor			
love			

Affec	Correlations Among Cultures
	(Based on Antecedents above and Consequents below diagonal)

	Α	G	I	J
A		.72***	.30	. 70***
G	.45*		.60***	.65***
I	.44*	.26		.24
J	.57***	, 58 <sup>***</sup>	.01	
	* p < .05 *** p < .001			
	• :	Affective Meaning	g Indices of TRUST	
$\mathbf{z}_{\mathbf{E}}$	0.83	0.76	-0.10	1.28
$z_p$	0.92	0.78	-0.47	1.66
z <sub>A</sub>	-0.12	0.13	0.25	-0.68
C	0.24	0.27	0.84	0.55

#### Discussion

The antecedent-consequent procedure was developed in order to provide a method for the study of the cognitive component of attitudes (Triandis, 1964, 1967), which would be of most relevance in studies of conflict resolution across cultures. This was achieved. The procedure was found to provide within-culture reliability and to reveal a number of meaningful cultural similarities and differences.

The information obtained by the antecedent-consequent procedure is different from that obtained from the semantic differential. While the new procedure explores the cognitive component of attitudes, the semantic differential explores the affective component. The two components are often interrelated, but there are many cases where the results obtained with one are unrelated to the results obtained with the other. Consider, as an example, the responses of the various cultures to the concept KNOWLEDGE. We note that the semantic differential profiles of the Americans and the Indians are gaite similar, while the semantic differential profiles of the Americans and the Japanese are much less similar. Yet, there is no significant tendency for the American antecedents to be the same as the Indian, while there is a significant tendency, (determined by Fisher exact test) for the American antecedents to be the same as the Japanese. We inspected such similarities on the semantic differential and the sntecedent-consequent method, across cultures, and no systematic relationship was found.

On the other hand, here was a slight systematic relationship between semantic differential judgments and the consequents given by certain cultures. We noted five occasions when the semantic differential profiles could be understood by examination of the antecedent-consequent results.

Five occasions out of twenty is not a very impressive overlap, but it suggests that the two methods are not entirely unrelated.

The examples are as follows:

- 1. The Indian semantic differential judgments of the concept COURAGE are distinguished by the fact that they are low in evaluation, potency, and activity. In other cultures this is not the case. Examination of the Indian consequents reveals that the Indians are significantly low in their frequency of seeing "self-confidence" as a consequent of COURAGE.
- 2. In Greece the concept PUNISHMENT is positively evaluated. The Greeks are unique in emphasizing positive consequents for this concept, such as "justice" and "reasonableness."
- 3. The concept POWER is positively evaluated in America and Greece and negatively in the other two cultures. Consistently with these evaluations, the Indians and Japanese give a variety of negative consequents, such as "enemies" and 'dictatorship."
- 4. The concept WEALTH is negatively evaluated in Greece and India.

  The consequences of WEALTH, according to the Greeks, include "selfishness;" according to the Indians they include "fear of thieves" and "arrogance."
- 5. The concept KNOWLEDGE is seen as passive in India, while the other cultures see it as active. The important antecedents of KNOWLEDGE in India include a "clear mind" (i.e., open, without noise), while in the other three cultures an "inquiring mind"—a much more active concept.

  Furthermore, the consequents in the other cultures include "self-confidence," "progress," and "advancement," which are rather active concepts, while in India these consequents do not occur. The Indian consequents of "a sense of superiority," "prestige," and "fame" are clearly less dyamic than in the other cultures.

One major purpose of the development of the antecedent-consequent method was to develop a procedure which would reliably distinguish between concepts having the same semantic differential profiles. This appears to have been achieved. For example, the concepts FREEDOM and POWER have similar profiles for Americans (about 1 unit above average in evaluation, about 1.5 units above average in potency, and about one unit above average in activity). Yet, the top antecedents of the two concepts do not overlap at all, nor do the consequents.

Looking at the actual semantic differential scores, instead of the standardized scores, COURAGE with a profile of 1.9, 2.0, and .7 is very similar to FREEDOM with a profile of 2.0, 1.8, and .6 (American data). Yet, the antecedents and consequents of these terms are entirely different. TRUST and WEALTH also have similar profiles (1.8, 1.6, -.01 vs 1.7, 1.7, -.02), yet again there is no overlap in either the antecedents or the consequents. Thus, the antecedent-consequent procedure provides new information not available from semantic differential measurement. Specifically, while the semantic differential profiles indicate the affective meanings, or "feeling tones," of a given concept, the antecedentconsequent procedure explores the perceived implicative relationships among concepts which include the concept under investigation. There is no reason for the two kinds of data to be interrelated. For example, it is logically possible for two events to have similar causes and different affective tones (war may lead to peace and also destruction) or for two concepts to have similar feeling tones but different antecedents or consequences (both CUCUMBER and FROG are affectively cold, but one comes from seeds and the other from eggs). One overall observation is possible:

amount of variance that is accounted by cross-culturally common factors.

The work with the antecedent-consequent method is impressive because of the large number of cultural differences that are obtainable through this method. It appears that the "learned biases" unique to each culture, are reflected more readily in the antecedents and consequents than ". The structure of affective meaning.

# The Study of Values Through the Antecedent Consequent Method

What kinds of antecedents and consequents are associated with concepts that are highly evaluated in each culture? Common themes found among such As and Cs would reveal underlying values, i.e. cultural patterns of preferences for certain outcomes.

Such an analysis was undertaken, and revealed that there were certain "universal themes" associated with "good outcomes." For example, in all cultures "morality," "proper behavior," and "good characteristics of the individual" were antecedents of valued concepts. However, the cultures did differ in the kinds of characteristics which they considered as good.

The ideal person according to the Americans would be highly motivated (achievement oriented, with drive, hardworking), seeking to improve himself, a good planne djust to others, courageous, faithful, showing respect for the rights of others, intelligent, curious, and experienced. According to the Greeks, the important characteristics are patience and will-power, followed by diligence, honesty, sbility, motivation, and courage. Note the absence of strong achievement themes or of the planning theme found among the Americans. According to the Indians, the important characteristics are discipline, tact, openness to experience, courage,

enthusiasm, and luck. Finally, according to the Japanese, the ideal individual is achievement-oriented, concerned with "being right," highly motivated, enthusiastic, courageous, faithful, has a pleasant personality, and shows respect for others.

Each culture has some additional themes as antecedents of good concepts. The Americans repeatedly mention "respect;" the Greeks "competition" and the "need of social control over the individual;" the Indians "encouragement" and "inheritance;" the Japanese "peace" and "cooperation."

The consequents that follow from "good" concepts emphasize the following themes:

American: individual progress, self-confidence, good adjustments status, serentiy (peace of mind), and satisfaction (achievement, joy).

Greek: societal well being (civilization, glory, victory) and individual success (more love, more appreciation by others).

Indian: increased status of the individual; glory; societal well being.

Japanese: serenity; aesthetic satisfaction; satisfaction; self-confidence, responsibility, peace, advancement, good adjustment.

Thus, while all groups emphasize satisfaction as a major consequent, the Americans and the Japanese are unusual in emphasizing serenity and good adjustment, as well as achievement, with the Japanese, in addition emphasizing aesthetic satisfactions. The Greeks are unusual in emphasizing the increased acceptance of the individual by others. The Indians are unusual in emphasizing increases in individual status more than the other cultures. At the risk of oversimplification, it appears that the Americans are hoping to reach a state where they have achieved must and can relax,

admiring their own self-development. The image of the millionaire self-made man enjoying his vacation-retirement suggests itself. The Greeks are hoping to reach a state in which they are greatly loved by others. The image of the adored central ingroup member is suggested. The Indians hope for a state in which they have much status, glory, and fame. The image of the Maharaja, on top of an elephant in a glorious procession, suggests itself. Are these images the distillions of the values of these four cultures?

Turning now to those concepts which were evaluated negatively, we can analyze the disvalues of the four cultures.

For the Americans, great disvalues are ignorance, loneliness, and injury to self-esteem. A consequent of unfortunate events is likely to be guilt. For the Greeks, injury to self-esteem (dishonor), superficiality, and loss of friends are likely to lead to destruction. For the Indians, frustration, bad spirits (demons), and dishonor are disvalues and may lead to loss of status. For the Japanese, deviation from the proper conditions, ignorance, and loneliness are disvalues and may lead either to guilt, or to introspection and correction.

Such themes fit the analyses of values, presented above. The American concern with achievement and self-development is clearly inconsistent with ignorance and injury to self-esteem. The Greek concern with being loved is inconsistent with dishonor, and loss of friends. The Indian concern for status comes through in all analyses. The Japanese concern for achievement and self development is inconsistent with ignorance; the aesthetic satisfactions may require idealistic norms.

A word of caution is needed. We have suggested that the antecedentconsequent method is effective in the exploration of implicit norms and
values. However, it must be remembered that much depends upon the
"meaningful" interpretation of the obtained results. The data are not
meaningful in themselves, without outside information concerning the
economic, political, religious and other cultural characteristics of the
samples that provided the responses. For example, to understand the
American under-emphasis of hunger as a cause of DEATH, one needs to know
about the availability of food in North America; to understand the Japanese
emphasis on length of life as an antecedent of DEATH one must know some
Japanese philosophy and history.

# Applications to Research on Conflict Resolution

In order to study conflict resolution in the laboratory, it is necessary to develop materials in relation to which subjects from different cultures are likely to show substantial disagreements. The present method, by revealing both cultural similarities and differences in the perception of implicative relationships among concepts, allows us to select concepts on which members of different cultures are likely to disagree. By examining the overlap in the antecedents and consequents of each of our 20 concepts across our four cultural groups, we can specify that particular pairs of cultures will experience conflict concerning particular issues. For example, we can predict that Americans and Greeks will disagree about issues centered around the concept of PUNISHMENT. Thus, if we were to give to negotiation teams consisting of Americans and Greeks a problem involving the inappropriate behavior of an employee and whether or not he should be punished by his supervisor, and what kinds of punishment would

be appropriate, etc., we would expect the Greeks to take a much "tougher" position on PUNISHMENT since "it is good for a man to be punished." We can even predict the kinds of arguments that the Greeks will present in the negotiations--"the man will become more reasonable after he is punished," "it is just that he be punished," etc.

Our data suggest that in a negotiation situation between Americans and Japanese there will be much agreement on the meaning of FREEDOM. But what if the Americans propose to use POWER to achieve FREEDOM? This is a more complex case because POWER is a negative concept for the Japanese, but not for the Americans. Cognitive interaction will probably change the evaluation of FREEDOM and will make it a less positive concept, for the Japanese. As the Americans insist on the use of POWER to achieve FREEDOM, the Japanese would be likely to see some of the words connected to POWER, 🐎 👵 become connected to FREEDOM. Thus, dictatorship and force and even war might become connected with FREEDOM: Thus, we might expect the Japanese to be most reluctant to accept the American proposal. The Americans would be at a loss to explain the Japanese reactions and would tend to think that the Japanese lack intelligence, knowledge and respect, since these are concepts connected with POWER for the Americans but not the Japanese. The Japanese, on their side, would deny that success, control and influence would result from the use of POWER. Thus, each side, assuming that the other has the same image of key terms like FOWER, is likely to find it more and more difficult to understand the reactions of the other. The disagreements would lead to further detorioration of the relationship. The Japanese would see the Americans as evil, power-hungry would be dictators and the Americans would see the Japanese as stupid and ignorant.

Of course, it is necessary to validat, these hypotheses. However, if such validation supports our predictions, the present method could become a powerful procedure for the determination of appropriate experimental materials for studies of negotiations across cultures. Furthermore, the method would provide a kind of "map" of the negotiations, predicting some of the arguments that would be used by each of the sides.

The next step to the present research, then, is the validation of the hypotheses suggested by the present study.

#### References

- Brown, R. W. and Lenneberg, E. H. A study in language and cognition.

  Journal of Abnormal and Social Psychology, 1954, 49, 454-462.
- Davis, E. E. and Triandis, H. C. An exploratory study of inter-cultural negotiations. Urbana: Group Effectiveness Research Laboratory,

  Technical Report No. 26, 1965.
- Deese, J. The structure of associations in language and thought.

  Baltimore: Johns Hopkins Press, 1966.
- Feldman, J. M. Stimulus characteristics and subject prejudice as determinants of stereotype attribution. Unpublished M. A. Dissertation. Urbana:

  University of Illinois, 1968.
- Ferguson, G. A. Statistical analysis in psychology and education. New York: McGraw-Hill, 1966.
- Fishbein, M. An investigation of the relationship between beliefs about an object and attitude towards that object. Technical Report No. 6,

  Los Angeles, California, Department of Psychology, University of California, 1961.
- Foster, K. I., Triandis, H. C., and Osgood, C. E. An analysis of the use of the method of triads in research on the measurement of meaning Urbana: Group Effectiveness Research Laboratory. Technical Report No. 17, 1964.
- Frijda, N. H. and Geer, J. P. van de. Codability-recognition: An experiment with facial expressions. Acta Psychologica, 1961, 18, 360-367.
- Hebb, D. O. and Thompson, W. R. The social significance of animal studies.

  In G. Lindzey (Ed.), <u>Handbook of social psychology</u>. Cambridge, <u>Mass.</u>:

  Addison-Wesley, 1954.

- Hockett, C. F. Chinese versus English: An exploration of the Whorfian thesis. In H. Hoijer (Ed.), Language in culture. American Anthropology Association, 1954.
- Jakobovitz, L. Comparative psycholinguistics in the study of cultures.

  International Nournal of Psychology. 1966, 1, 15-38.
- Kluckhohn, C. Culture and behavior. In G. Lindzen (Ed.), <u>Handbook of</u>
  social psychology. Cambridge, Mass.: Addison-Wesley, 1954.
- McLeod, R. B. The phenomenological approach to social psychology.

  Psychological Review. 1947, 54, 193-210.
- Osgood, C. E. Semantic differential technique in the comparative study of cultures. American Anthropologist. 1964, 66, 171-200.
- Osgood, C. E. Speculation on the structure of interpersonal intentions.

  Urbara: Group Effectiveness Research Laboratory, Technical Report

  No. 39, 1966.
- Osgood, C. E., Suci, G. J., & Tannenbaum, P. H. The measurement of meaning. Urbana: University of Illinois Press, 1957.
- Peak, Helen. Attitudes and motivation. In M. Jones (Ed.), Nebraska

  symposium on motivation. Lincoln: University of Nebraska Press,

  1955.
- Rosenberg, M. J. Cognitive structure and attitudinal affect. <u>Journal of</u>
  Abnormal and Social Psychology, 1956, 53, 367-372.
- Steffire, V., Vales, C. C., & Morley, Linda. Language and cognition in Yucatan: A cross-cultural replication. <u>Journal of Personality and Social Psychology</u>, 1966, 4, 112-115.
- Szalny, L. B. and Brent, J. E. The analysis of cultural meanings through free verbal associations. Journal of Social Psychology. 1967, 72, 161-187.

- Tanaka, Y., Iwamatsu, Y. & May, W. A. Cross-rultural investigation of nation perception. Reported in Tanaka, May & Iwamatsu (1968).
- Tanaka, Y., May, W., & Iwamatsu, Y. Psycholingusitic studies on the cross-cultural generality of cognitive interaction. Proceedings of the 11th Inter-American Congress of Psychology, 1968 (in press).
- Triandis, H. C. Cultural influences on cognitive processes. In L.

  Berkowitz (Ed.), Advances in experimental social psychology. New

  York: Academic Press, 1964, Vol. I, pp. 1-48.
- Triandis, H. C. Towards an analysis of the components of interpersonal attitudes. In Carolyn W. Sherif and M. Sherif (Eds.), Attitude, ego-involvement and change. New York: Wiley, 1967.
- Triandis, H. C. & Vassiliou, Vasso. A comparative analysis of subjective culture. Urbana: Group Effectiveness Research Laboratory,

  Technical Report No. 55, 1967.
- Vroom, V. Work and motivation. New York: Wiley, 1964.

### DOCUMENT CONTROL DATA - R&D

1. ORIGINATING ACTIVITY (Corporate author)

Group Effectiveness Research Laboratory Department of Psychology University of Illinois, Urbana, Illinois

2a. REPORT SECURITY CLASSIFICATION

Unclassified

3. REPORT TITLE

Cultural Influences Upon the Perception of Implicative Relationship Among Concepts and the Analysis of Values

4. DESCRIPTIVE NOTES (Type of report and inclusive dates)

Technical Report

5. AUTHOR(S)

Triandis, Harry C., Ki\_ty, Keith M., Shanmugam, A. V., Tanaka, Yasumasa, & Vassiliou, Vasso

6. REPORT DATE

April, 1968

7a. TOTAL NO. OF PAGES

116

7b. NUMBER OF REFERENCES

26

Sa. CONTRACT OR GRANT NO.

Nonr 1834(36)

8b. PROJECT NO.

2870

- c NR 177-472
- d ARPA Order #454

9a. ORIGINATOR'S REPORT NUMBER

Technical Report No. 56 (68-1)

10. AVAILABILITY/LIMITATION NOTICES

Distribution of this Document is Unlimited

## 11. SUPPLEMENTARY NOTES

## 12. SPONSORING MILITARY ACTIVITY

Department of Navy Office of Naval Research Group Psychology Branch

## 13. ABSTRACT

A new method for the analysis of the implicative relationships among concepts was presented. The method has sufficient reliability. It reveals meaningful cross-cultural differences in the perception of 20 concepts. The responses of approximately 1,500 male students, from Illinois, USA, Athens, Greece, Southern India, and Tokyo, Japan, provided information about cultural differences in the perception of causal relationships involving these concepts. The data were also employed in an analysis of values. The major trends of the results suggest that the Americans valued mostly achievement, self-development and peace of mind; the Greeks affiliation; the Indians status; and the Japanese achievement, self-development and aesthetic setisfaction.

### 14. KEY WORDS

America
Greece
India (Kannada)
Japan
cross-cultural
implicative relationships
implicate
antecedent
consequent
semantic differential
affect
cognition
values
conflict resolution